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ABSTRACT

The Colorado Consortium on Research Development (CORD) was formed in 1968 to increase research potential among the faculties of the 6 participating institutions. Its major objective was to improve these institutions' interest and capabilities in educational and institutional research through cooperative studies, by faculties, administrators, and supporting personnel. This report briefly reviews the establishment of the Consortium and the activities undertaken in its behalf. These included: advisory committee meetings, local faculty research committees, seminars, individual faculty research projects, interinstitutional research, newsletters, attendance at conferences outside CORD, and other activities. Included in the appendices are reports of: (1) interinstitutional research projects; and (2) individual faculty research projects at the participating institutions; (3) a listing of Directors and Advisory Committee members; and (4) a copy of the Newsletter, Number 6. (AF)

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FINAL REPORT

PROJECT NO. 8-H-901

GRANT NO. 8-8-080901-4001 (057)

PROGRAMMATIC SUPPORT FOR THE DEVELOPMENT OF RESEARCH CAPABILITIES IN A CONSORTIUM OF HIGHER EDUCATION INSTITUTIONS IN COLORADO

COLORADO CONSORTIUM ON RESEARCH DEVELOPMENT

AUGUST, 1971

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HEALTH, EDUCATION, AND WELFARE

OFFICE OF EDUCATION
BUREAU OF RESEARCH

FINAL REPORT

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PROGRAMMATIC SUPPORT FOR THE DEVELOPMENT OF RESEARCH CAPABILITIES IN A CONSORTIUM OF HIGHER EDUCATION INSTITUTIONS IN COLORADO

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August 31, 1971

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Summary

The Colorado Consortium on Research Development was formed in January 1968, to increase research potential among the faculties of six Colorado Colleges and Universities. They included: Colorado College, Loretto Heights College, Regis College, Southern Colorado State College, Temple Buell College (Colorado Women's College, at the beginning of the Consortium), and the University of Denver.

The overall objective of the Consortium was "to establish a consortium . . . with the major purpose of improving in these institutions interest and capability in educational and institutional research through cooperative studies by faculties, administrators and supporting personnel."

Specific objectives were as follows:

1. Acquaint, stimulate, and support faculty and administration in the . . . institutions by providing the latest information on the growth, trends and significance of institutional and educational research.

2. Develop those necessary attitudes, knowledge and skills basic to produce purposeful, effective research.

3. Develop the rationale, policies and practices basic to sound administration of educational and institutional research.

4. Sensitize, stimulate and support faculty efforts to engage in research.

5. Define mutual problems, distinguishing between those best analyzed by joint, inter-disciplinary and interinstitutional efforts and those appropriate for individual institutional studies.

6. Undertake one or more common research projects capitalizing on the strengths of existing personnel and facilities of the consortium.

7. Develop a structure to facilitate the sharing of studies, information, and potential and related solutions to both common and unique problems in the member institutions.

The Consortium operated with a Director (half-time) and an Advisory Committee of one representative from each member institution. In addition, following a suggestion from the Office of Education, a Faculty Research Committee was created in those institutions that did not have such a committee. The Advisory Committee member served on his institution's respective committee. Funds for faculty research studies were given to each institution and allocated by the Faculty Research Committee. These committees and the local Advisory Committee member also worked to encourage research and assisted faculty in writing proposals.

Originally the project paid the institution for the time spent by the Advisory Committee members on the business of the Consortium. Beginning on July 1, 1969, these budgeted funds were added to monies used for faculty research grants. Each institution then donated 20 percent release time for each board member to attend to the work of the Consortium.

Fifty-five individual faculty research projects from the six institutions were funded. In addition, seven seminars were held for the faculty and administration of the institutions. One of the seminars was based on the funding and reporting of expenditures of government projects and was attended by the business administrators of the member institutions. Two interinstitutional research projects were carried out by Advisory Committee members to increase their knowledge and sophistication in research design and methodology.

A Newsletter was initiated in November, 1969, to disseminate information about the Consortium activities, to give recognition to researchers, and to publicize research results within the Consortium and to interested persons. Six issues have been published and disseminated since that time.

The results of the project, in addition to the research projects cited, are diverse and varied. Yet, the project met in large part, the objectives set forth by its founders, mediated by the changing conditions during its life. Each institution has a faculty research committee at the present time and continues to support faculty research to varying degrees. Each institution has formulated a statement outlining college policy on research by faculty and administration members. Faculty are more aware and interested in doing research, the results of research, and the implications of research for education. Several members of the Advisory Committee and Directors have begun education leading to a doctorate in education or have entered into research positions outside the Consortium.

Introduction

Beginning in September 1966, a series of meetings was held by members of eight colleges and universities in Colorado in an attempt to begin a sustained and cooperative effort in the areas of institutional and educational research. Of the initial group of eight institutions, two were new and as yet unaccredited (Arapahoe Junior College and Metropolitan State College) and thus were ineligible to join the CORD project. Members from these institutions continued to attend meetings and conferences for the first two years of the project. Preparations for the project continued and the project formally began on January 8, 1968.

The overall objective of the Consortium was "to establish a consortium . . . with the major purpose of improving in these institutions interest and capability in educational and institutional research through cooperative studies by faculties, administrators and supporting personnel."

Specific objectives were as follows:

1. Acquaint, stimulate, and support faculty and administration in the . . . institutions by providing the latest information on the growth, trends and significance of institutional and educational research.

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7. Develop a structure to facilitate the sharing of studies, information, and potential and related solutions to both common and unique problems in the member institutions.

In the original proposal, the information provided by the member schools indicated that only two schools had faculty research committees. In addition, two supported faculty research in some measure, while the

University of Denver had specific support for graduate faculty research only. Each school showed some past experience and expertise in institutional research. All indicated a need for educational research and the necessity to involve individual faculty members in research of the educational process. The focus for the Consortium was thus educational research and institutional research of a kind that would carry application beyond the local institution.

The Consortium was administered by a paid director (half-time) from the Contracting Institution (Loretto Heights College) and an Advisory Committee made up of one person from each member institution. A listing of Directors and Advisory Committee members appears as Appendix C.

Following a suggestion of the Office of Education, a local research committee was set up in each member school to screen faculty research proposals, to foster research by faculty and administration and to assist in the conceptualization and writing of proposals. The member of the Advisory Committee from each institution was a member of this local research committee.

Methods

The objectives of the Consortium were carried out in several ways.

1. Advisory Committee meetings.
2. Local Faculty Research Committees.
3. Seminars.
4. Individual faculty research projects.
5. Interinstitutional Research.
6. Newsletters.
7. Attendance at conferences outside CORD.
8. Miscellaneous activities.

Advisory Committee Meetings: Advisory Committee meetings were held monthly during the academic year. They provided a vehicle for inter-campus exchange of information, ideas and enthusiasms. These meetings were also attended at various times by faculty from Arapahoe Junior College and Metropolitan State College. This mingling of people and ideas from all sources provided an intangible but nevertheless significant stimulus to educational research. The Advisory Committee was involved in, and in some cases took primary responsibility for planning conferences. In all cases they reviewed the interim work of the director, giving direction for future projects. In addition, the Advisory Board undertook two interinstitutional research projects. These projects, although researching subjects of interest to all, were primarily designed to help the advisory committee members to conceptualize, plan, and carry out the steps in educational research.

Local Faculty Research Committee: Each member college was given equal amounts of money to stimulate and fund individual faculty research. The task of the local Faculty Research Committee was to stimulate individuals to do research on subjects of interest to them, to help in the writing of proposals, and eventually to screen proposals for funding using specific criteria to ensure fairness. Each committee set up and publicized guidelines for research. The needs of each college were different, and each committee tailored its activities to meet the needs of its institution. Although all members were interested in research, they had a varied knowledge of the methodology. Most research committee members attended the seminars to increase their knowledge of research so they might carry out research themselves and/or help disseminate knowledge through the faculty.

Seminars: Seven seminar type conferences were held by the Consortium.

1. On April 20, 1968, a seminar on "Research in the Small College" was held at the University of Denver with 44 participants from the Consortium, Metropolitan State College, and Arapahoe Junior College. The seminar brought together representatives of several disciplines from different institutions exploring the place of research in the small college.

2. On October 23, 1968, Temple Buell College hosted a seminar for the local Faculty Research Committees and other interested administration and faculty from member schools. Dr. Larry Hayes, Director of the Oklahoma Consortium on Research and Development, spoke to the group about the experiences of Oklahoma Consortium. There were 20 participants. The major objective of the conference was to discuss means of stimulating interests and capabilities of individual faculty members of participating institutions.

3. On April 19, 1969, a conference on "Effective Proposal Writing" was held at Loretto Heights College with 49 participants from CORD and Metropolitan State College. In addition to speakers, the conference included case study consideration of actual research proposals by small conference groups.

4. On November 13, 1969, a seminar for the business managers of CORD schools was held at Loretto Heights College. The emphasis was on financing and report writing for government projects.

5. On November 15, 1969, a RED Train Workshop* was held at Temple Buell College with 15 participants. A total of 82 educators requested and received the workshop materials. This conference used materials produced by the Oregon CORD group on the methodology and conceptualization of educational research.

*Research in EDucation TRAINing Workshop.

6. On January 24, 1970, a similar workshop was held at Southern Colorado State College. Twenty-five persons participated and 41 persons requested and received materials. Both of these RED Train conferences were followed by periods of several weeks in which specially prepared materials such as slides, tapes, workbooks, etc. were placed in accessible areas for the use of participants.

7. On April 23-25, 1971, a conference was held on the "Applications and Implications of Educational Research" in Estes Park for 27 participants. Since previous conferences were focused primarily on methodology and research design, this conference attempted to give an overview of the development of research in higher education.

Individual Faculty Research Projects: The individual faculty research projects were initiated as "seed" projects to introduce faculty members to educational research and to fund small projects which might be expanded into larger projects with funding sought from private foundations or through the Regional Research Program of the United States Office of Education. A total of 55 individual projects have been funded during the project. A summary of each proposal and results (if obtainable to date) will be found in Appendix B. The proposals vary in the expertise of design, methodology and results obtained but represent in most cases a beginning in research which was not in evidence before the Consortium existed.

Interinstitutional Research Projects: Two projects were carried out by the Advisory Committee Members themselves. These projects were planned to increase the skill and sophistication of the Advisory Committee members in doing educational research. A final report on the first project on "Problems in Articulation from Selected High Schools to Certain Colleges and Universities" was enclosed as Appendix A in the Progress Report submitted April 15, 1971. The Advisory Committee members felt that considerable learning had taken place in the areas of delimiting the scope of projects, research design, and methodology. The results of the study were used by Southern Colorado State College as validation for another survey undertaken by an outside agency. The report was also used in an institutional self study for the North Central Association accrediting visit in the 1970-71 school year. Most of the final report writing was the work of the Advisory Committee member from Southern Colorado State College, Professor Glen Allen. (A summary of the report appears in Appendix A.)

The final report on "Baccalaureate Origins of Colorado College and University Faculties" was made in the Colorado CORD Newsletter Number Five of April, 1971. (Appendix A of the Progress Report of June 30, 1971) The Advisory Committee members assisted in collecting data and approved the forms used in the study, which was largely carried out by Dr. Allan O. Pfnister, the Advisory Committee member from the University of Denver. (This report appears in Appendix A.)

Newsletters: The first Newsletter was published in November, 1969. Its stated objectives were: 1) to tell faculty and administrators at CORD schools what CORD as an organization is doing; 2) to let people know what is happening in educational research on various CORD campuses; 3) to reinforce existing interest in experimentation and research in education.

Individual issues varied in content but essentially printed material to carry out Consortium objectives. The newsletters were circulated to faculty of the member schools, to other CORD units (through June 1970), and other interested persons.

Newsletter number one was included as Appendix B in the Progress Report of January 15, 1970. Newsletter number two was included as Appendix B in the Progress Report of April 15, 1970. Newsletter number three was included as Appendix B of the June 30, 1970 Progress Report. Newsletter number four was included as Appendix B of the April 15, 1971 Progress Report. Newsletter number five was included as Appendix A of the June 30, 1971 Progress Report. Newsletter number six is included as Appendix D of this Final Report.

Attendance at Conferences Outside CORD: To foster a wider understanding of educational research, the Consortium has sponsored attendance at conferences on Educational Research in Higher Education.

The first CORD Director, Dr. Frank Kerins, attended the National Research Training Institute in Michigan, August 18-30, 1968.

The third CORD Director, Dr. Sonya Read, and the Advisory Committee member from Temple Buell College, Professor Wallace Hunter, attended the National Research Training Institute in Monmouth, Oregon, August 17-29, 1969.

The fourth CORD Director, Professor Marie Milliken, attended the Dissemination Conference of the Oklahoma Consortium on Research Development from March 12-13, 1970 at Edmond, Oklahoma.

Dr. Allan O. Pfnister, Advisory Committee member from the University of Denver, attended the Annual Meeting of Comparative and International Education Society March 21-23, 1971, at San Diego, California.

Dr. John M. Love, Advisory Committee member from Temple Buell College, attended the Annual Meeting of the Society for Research in Child Development April 1-4, 1971, in Minneapolis, Minnesota.

Professor Donald L. Salmon, Advisory Committee member from Regis College, attended the Conference on Higher Education, May 9-10, 1971, at Boston, Massachusetts.

Reports have been given to the Advisory Committee on the activities at these various conferences and have enlarged the knowledge of all committee members.

Miscellaneous Activities: Several activities have been carried out by the initiative of Advisory Committee members and local research committees to stimulate research and teach research methodology.

Four college faculties were surveyed regarding potential research interests. Thirty-two members of the Loretto Heights College faculty, 14 faculty members at Temple Buell College, nine faculty members at Regis College, and 36 faculty members at Southern Colorado State College indicated interest in doing educational research either individually or with other faculty members.

On October 23, 1969, a Research Day was held at Loretto Heights College. This venture, co-sponsored by CORD, the Faculty Research Committee and Loretto Federal Programs Office, involved establishment of a research information center for the day. Faculty and administrators were invited to stop by and discuss potential research interests. Information on funding services, as well as assistance with proposal writing, design, etc., were provided. Approximately 40 individuals visited the center during the day and a number of previously unknown research interests were discovered.

Through the efforts of Professor Glen Allen, Advisory Committee member at Southern Colorado State College, the educational materials of the RED Train project were incorporated into the library system at that college for use by faculty, administrators, and students.

Results

The long term results of the project are incalculable. The survey of research interests indicate strong interest by 15 percent or more* of the faculties of four member institutions. Coupled with interest is the acquisition of basic knowledge of how research is conceptualized, planned, and carried out, gained from CORD conferences. Much research could be generated in the future from CORD institution faculty members. The awareness of the implications and applications of educational research may lead many college faculty and administrators to read and apply the results of research done by others.

* Interest ranged up to 40% at Loretto Heights College and 10% at Regis College

The following comments from the presidents of member colleges indicate in part the impact of CORD in these institutions:

> The use of Consortium funds in the past year has provided a major stimulus for selected faculty members to initiate research projects which have benefited curriculum planning and new approaches to teaching methods.
>
> Eugene E. Dawson, Ph.D.
> President, Temple Buell College

> All of us at the University appreciate the way in which the CORD grant has assisted the campus in stimulating educational research.
>
> Maurice B. Mitchell
> Chancellor, University of Denver

> The educational research conducted by Professor Glenn Brooks, the previous Advisory Board member, has led to an extensive and significant revision of our approach to liberal education. We are grateful for the role CORD has played in this important departure at Colorado College.
>
> Lloyd E. Worner
> President, Colorado College

> We feel that CORD has had a most significant impact on Loretto Heights College by stimulating and supporting educational research among our faculty members. CORD provides an avenue for interinstitutional cooperation, enabling faculty members from a number of educational institutions to work together in projects which are of mutual benefit. Specifically, on the Loretto Heights campus three projects - one dealing with values, another with creativity and a third with mathematics curriculum - would not otherwise have been possible.
>
> Patricia Jean Manion, S.L.
> President, Loretto Heights College

> Once again I would like to thank CORD and all of its members for the great impact it has had on our Regis campus in stimulating and supporting an educational research program among our faculty members.
>
> Louis G. Mattione, S.J.
> President, Regis College

Interest in educational research has been stimulated through efforts of CORD in such areas as workshops and seminars attended by members of our faculty. Many intangible benefits, as well as measureable benefits have accrued to the college from these activities, and we are certain that the faculty will continue to reap the benefits available from an awareness of and the application of a concerted, systematic approach to solving problems. Many of our faculty members are making use of the RED Train materials for research training made available to our institution by CORD.

J. V. Hopper, Ph.D.
President, Southern Colorado
State College

The short term results of CORD may best be evaluated by referring to the initial objectives of the project.

1. *Acquaint, stimulate and support faculty and administration in the . . . institutions by providing the latest information on the growth trends and significance of institutional and educational research*. This objective was met primarily by CORD conferences dealing with the implications and applications of educational research.

The newsletters also informed all faculty and administrators of research in member institutions.

2. *Develop those necessary attitudes, knowledge and skills basic to produce purposeful, objective research*. 4. *Sensitize, stimulate and support faculty efforts to engage in research*. These objectives have been combined because of their similarity.

It appears from the initial proposal that the number of educational research projects being carried on in the colleges at that time was very limited. The 55 projects undertaken by faculty members and administrators with CORD support certainly indicate an increase in capability to engage in research.

The activities of the Local Faculty Research Committee at each college was a factor in increasing knowledge of research on the individual campuses. The willingness of the administrations of member schools to provide a 20 percent release time for Advisory Committee members so that support might be granted to individual faculty projects indicates a strengthening support for the research function in Education.

3. Develop the rationale, policies and practices basic to sound administration of educational and institutional research. Each institution has at present a faculty research committee to control in part the research that is supported by CORD and the local institution. Each local committee has developed guidelines for research by members of that institution. The guidelines have been approved by the respective administrations. The University of Denver has developed an Office of Grants to publicize research funding opportunities, assist in formulating proposals and other similar functions. They also have a Bureau of Educational Research associated with the School of Education. The other member institutions do not at present have official departments to carry on these functions. This is in part due to the growing financial problems of small private colleges, since Loretto Heights College, for example,did in the past have persons with this specific function.

The Business Managers' conference did help clarify procedures for sound handling of monies given for research by government and private sources.

5. Define mutual problems distinguishing between those best analyzed by joint, interdisciplinary, and interinstitutional efforts and those appropriate for individual institutional studies. 6. Undertake one or more common research projects capitalizing on existing strengths of existing personnel and faculties of the Consortium. These related objectives were met only in part. The turnover of personnel on the Advisory Committee and in the Director's position hindered members of the governing group from gaining mutual knowledge of each other's institution.

The interinstitutional projects carried out by the Advisory Committee focused most particularly on the interests of the Advisory Committee members. These projects provided training in research methodology for the committee. The results did have relevance for the member institutions, but results were not the prime objective of the studies.

7. Develop a structure to facilitate the sharing of studies, information, and potential and related solutions to both the common and unique problems of member institutions. Information of this kind was shared in several ways, both formal and informal.

The Newsletters and other CORD publicity and information were given to each faculty member and administrator of the member institutions. Conferences were publicized widely in the member institutions and information on the results of selected educational research was given to those attending.

Advisory Committee members attending conferences outside of CORD did report on the information gleaned from these conferences both to their collegues in member colleges and to the Advisory Committee. This information was in turn transmitted to local Faculty Research Committee members at CORD institutions.

Conclusions and Recommendations

The project met, in large part, the objectives set forth by its founders, mediated by the changing conditions during its life. Faculty members and administrators of member colleges are more aware of the benefits of educational research and the necessity of such research in testing methods and in planning innovative projects. The experimental method in education is vital to its future usefulness in the rapidly changing world.

It is evident that the research done by faculty members varied in sophistication and usefulness. The involvement is seen as the most important step. Those who attended conferences and did not conduct research would have a different perspective on the teaching-learning process. They would have a more critical attitude toward teaching methods, curricular development and other facets of education, and would perhaps test out their planned changes in more informal ways.

Local Research Committees will continue with budgets limited by the financial ability of the local institutions. Throughout the CORD projects the administration of each member institution has offered firm commitment to continue to foster educational research in their respective institutions.

The interinstitutional cooperation which has been so evident during the project will not survive with formal structure beyond the end of the CORD project, although some informal relationships are expected to continue.

One of the major problems of the Consortium was the almost constant turnover of personnel. Although this turnover did introduce a larger number of persons into the Advisory Committee and Directorship, it tended to prevent a cohesiveness which would have made the Consortium's continuation certain.

In summation, the Consortium did have an impact on the member institutions and their faculties and administrations which can only be measured by the future activities beyond its demise.

APPENDIX A

INTERINSTITUTIONAL RESEARCH

Problems in Articulation
from
Selected High Schools
to
Certain Colleges and Universities
(Summary Version)*

by

Glen Allen, Member
Colorado Consortium on Research Development
Composed of:

  Colorado College
  Loretto Heights College
  Regis College
  Southern Colorado State College
  University of Denver
  Temple Buell College

July, 1970

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* The complete text of this report may be found in CORD files

Introduction

The original purpose of this project was to conduct a pilot study in anticipation of a larger study concerning the problems encountered by first time entering freshman from high school to college. With the full realization of the infinite number of variables that would be encountered in undertaking a project of such limitless scope, it was decided that we must limit our study to one particular area, that area concerned with Social Studies. Conclusions drawn from the pilot study were to be used as a jumping-off point for widening the scope to the total curriculum.

Nine high schools were selected to take part in the study because each school contributed a number of students to most of the colleges in the Consortium. Administrators of each high school were contacted and after several meetings with the Social Studies teachers at the high schools, five of the nine schools agreed to participate in the study. The schools participating are:

High School	City	Approx. Enrollment	Type
George Washington High School	Denver	3,000	Public
Thomas Jefferson High School	Denver	3,400	Public
St. Mary's Academy	Englewood	200	Private
Pueblo Central High School	Pueblo	1,600	Public
Roncalli High School	Pueblo	400	Private

Procedures

A. To assess the expectations of those students from the five high schools applying and entering the member colleges, and after one year (Spring 1969) to assess the realities of their experiences and compare them.
Instrument: 50 Item Modified CUES.* A pre-test (with scales based on expectations) during the summer of 1968, and a post-test in the spring of 1969.

B. To assess the climate of the selected high schools through the students in Social Studies classes, administrators and Social Studies teachers.
Instruments: 1. 50 Item Modified CUES.
2. Teacher questionnaire.

*CUES (College and University Environmental Scales) is an instrument developed by C. Robert Pace at the University of California at Los Angeles. It uses student perceptions as a measure of college environments. It has five scales, Practicality, Community, Awareness, Propriety, and Scholarship to describe educational differences among colleges in the United States. Each scale has 30 items for response, or a total of 150 items.

C. To assess the college teaching methods in the Social Science areas by administering a questionnaire to the Social Science teachers at the member colleges.
Instrument: 1. Teacher questionnaire.

D. To assess the validity of the environmental perceptions in B and to identify high school-college articulation problem areas in Social Studies by the following methods:

1. Analysis and comparison of high school courses, reading lists, syllabi, etc.
2. Analysis and comparison of high school and college teaching methods and strategies. Analysis and comparison of type and amount of writing and testing at the high schools and colleges, along with the efforts toward developing independent study habits.

SUMMARY

It was of some interest that about 66% of the high school respondents held a Master's degree. It is also interesting that the percentage was higher in the Denver schools. The source of these degrees provides a contrast between the two groups involved. Approximately 70% of the high school teachers obtained their degrees in Colorado, whereas only around 30% of the college teachers did. Another contrast lies in the fact that far more high school than college teachers took their degree in the field of education.

Teaching methods at the colleges and high schools are very much the same, with lecture and class discussion the most mentioned method employed. The high school teachers had indicated small group discussion with some degree of consistency, while the college teachers used it to lesser degree.

Uniformity of class size among the high school respondents is noted, and contrasts with the situation reported in college where larger class sizes prevail.

The questionnaire brought out another difference in preference between college and high school teachers. In college, out-of-class assignments center about the written report, while in high school several kinds of background reading take precedence over student writing.

Regarding evaluation of student work, most teachers used some sort of testing. High school teachers preferred the objective test, while those teaching at the college level liked essays and various written reports.

Almost all respondents were able to discern some sort of change in subject content or teaching method and strategy in the classroom. Most saw these changes as desirable.

Among the many changes noted in the past five years, one finds repeated mention of new teaching aids and books, the social revolution in the United States and its bearing upon subject matter and method, new information coming to light as a result of heavy research activity, an increase in the inductive or inquiry approach in teaching history, less rigid methodology, and a feeling of much greater freedom on the part of both student and teacher in general. This feeling of freedom, a hint of a new vigor in the schools, a kind of free-wheeling open minded approach, seems to be the only discernable trend uncovered by the questionnaire. It is only a hint, and would require additional research for confirmation.

The last question involved pressures brought to bear upon the teacher. Most felt that there were few such pressures.

Modified CUES Analysis--High School Analysis

The Modified CUES is used as a means of assessing the school environments as perceived by the students. The environment is defined by what students perceive as characteristic of their school, their teachers and their classmates. Since this is what the student perceives the atmosphere of his school to be, the results are tabulated by each school as a means of hypothesizing the total population of that school from this sample. In analyzing the results, it would be appropriate for each school to determine the atmosphere of the school as it is perceived by the faculty and administration, and then to compare with the results enumerated in this project. This inevitably leads to an assessment of the goals, guidelines and policies of each individual school.

The purpose of CUES is to measure how the student perceives his teachers and his classmates. After comparing the response percentages, and analyzing the means of the individual responses, the students of Thomas Jefferson and Central High Schools are very similar in their opinion concerning the educational environment of their schools. If the two schools do have a similarity or a sameness in their educational environment, is this the result of the goals, policies, and guidelines set by the faculty and administration, and realized through the conduct of the teachers in their classes?

Roncalli and St. Mary's students, although both are private, church related schools, do not indicate similarity of educational environments on any of the five scales when using thet test. There is some degree of sameness, however, if the percentile ranking is used. The percentile rank is based on raw scores of selected colleges and universities, and may or may not be applicable to a high school educational environment.

Modified CUES Analysis--College Analysis

The original plan for the articulation study involved eight colleges: Arapahoe Junior College, Colorado College, Metropolitan State College, Loretto Heights College, Southern Colorado State College, Temple Buell College, Regis College, and the University of Denver. Each of the eight colleges submitted the names and addresses of students from nine selected high schools, graduating in the Spring of 1968 who had applied for and had been admitted to that college. The students listed were mailed the Modified CUES instrument with a return envelope. The individual was asked to complete the CUES instrument and return to CORD. A second request was mailed to those persons not replying within a specified period of time.

The CUES instrument was to be administered to these same students in the Spring of 1969; however, only three of the colleges administered the test to those students who had taken the CUES in the summer of 1968, enrolled in college and remained in college through the Spring of 1969. The three colleges were Loretto Heights, Temple Buell and Southern Colorado State College. As a consequence, the pre-test, post-test comparison will be made for these three colleges only. The effectiveness of the measurements are impaired by the small number of CUES for both Loretto Heights and Temple Buell, with only 8 and 10 pre-enrollment CUES, and seven and three post-enrollment CUES, respectively.

The administration of the CUES for the pre-enrollment phase of the study is rather inconclusive for Arapahoe Junior College, Loretto Heights College, Temple Buell College and in particular, Regis College, due to the minimal number of students queried.

It is apparent, that the high school student expects the college educational environment to differ markedly from what he viewed the high school educational environment to be. However, after one year on campus, on four of the five factors concerning the college educational environment, the freshman student found a similarity to the high school environment, but found no similarity to what he expected the college environment would be.

It should be noted, that the results for the college environment were influenced greatly by SCSC students, where 66 persons answered the CUES instrument on the post-test phase, compared to only three individuals at Temple Buell College and seven persons at Loretto Heights College. The composition of the returns for SCSC, could also bias the results, if a large percentage of the returns were Pueblo residents. SCSC mailed 117 instruments, of which 36 (31%) were residents of Denver or Colorado Springs, and 81 (69%) were Pueblo residents. There were 66 instruments returned or a return of 56%. The CUES were unmarked, therefore, the person returning the questionnaire was not known, and as a result, the residence composition of the returnees is unknown.

The student body composition of SCSC, consisting so greatly of Pueblo residents, may be a continuation of the high school experience for a large percentage of the students, or it may be that the non-Pueblo students exert a great enough influence on the campus activities to change the environment. No studies have been made on this, and it may be that in order to validate the results of this project, such a study would be required.

The students at the high school perceive the high school environment to be different from what the college environment will be like. However, a t test computation shows the educational environments to be similar for the high schools and the colleges, except on the practicality phase of the environment. It shows then that the college environment is quite similar to the high school environment, except on the practicality aspect of the environment.

Conclusions

Teaching methods, and objectives for the high schools are quite similar, as are the testing methods. The teachers' backgrounds are similar in years of teaching experience, and degrees held, with Thomas Jefferson teachers having an edge in percentage of masters to bachelors degrees and years of experience. It is unlikely then that the resemblance, on four of the five environmental scales of Central and Thomas Jefferson, resulted primarily or wholly from these factors, however.

There were few differences noted in teaching methods, and objectives from the high school teachers and the college teachers responses. Testing methods were somewhat more varied, but the greatest unconformity was in the area of class size. The high school teachers noted a uniformity in size of classes from 20-40 students, as compared to the college teachers responses indicating very large class sizes, some exceeding 100 students. There did not appear to be any great differences in the educational environments, and the result of the CUES post-test indicates a similar conclusion.

The CUES pre-test, post-test results indicated that the student's expectations of the college environment before enrolling, is different from what the environment was perceived to be after the student had been in college for one year. The exception to this would be the community awareness and propriety aspects of the Loretto Heights educational environment, as prospective students' responses using the t test indicates. However, the smallness of the sample size (N=8 pre-test; N=7 post-test) indicates further testing is necessary before concluding that the results apply to most of the applicants and students at Loretto Heights.

Due to the many deficiencies noted in the study, the original goal of the project has not been completed. It would be necessary that a team of educational experts be used for a visitation to each campus to assess the climate of the school. However, much reliance would necessarily be placed upon opinions that could not be quantified and fully proven. Therefore, any future project dealing with the transition from high school to college should use some method of quantifying all types of opinion concerning the environment of a school, resulting from observation and study of the curriculum. To do this, would mean a further restriction on the discipline involved, ie., History only, or Sociology only.

Future projects of this nature should involve the use of ACT, or similar scores, as a device for helping ascertain a lack of challenge, or perhaps a disillusionment on the part of the student from his encounter with the college curriculum. There should be other approaches to assessing the environment, other than student opinion, perhaps a well designed questionnaire-interview with randomly selected administrators, teachers and other school personnel. It is possible that the assessment of the environment through student opinion solely may be misleading.

Baccalaureate Origins of Colorado College and University Faculties

Allan O. Pfnister
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An analysis of the baccalaureate origins of a nationwide sample of college and university faculties in 1955-56 revealed a significant number of faculty members teaching within the same census region in which they had earned baccalaureate degrees. The number of faculty teaching in the census region in which the baccalaureate degree had been earned exceeded by over 300% the number expected if a free market situation were operating. Particularly noteworthy was the Mountain region (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming), where the number teaching and receiving baccalaureate degrees exceeded expectations by almost 860%. (Allan O. Pfnister, A Report of the Baccalaureate Origins of College Faculties, Washington, D.C.: Association of American Colleges, 1961, pp. 34-35.)

Now, some 15 years later, a study currently underway is exploring whether the same regional "attraction" seems to be operating. During the 15 years between 1955-56 and 1970-71, American higher education has changed in significant ways. Enrollments have increased by more than three times, and the total staff has increased by 3.6 times. During the last 10 years, there seems to have been a greater measure of faculty mobility than had been experienced for many years before. Under these circumstances, one would expect the regional "attraction" to be less strong, but one must ask: Have college and university staffs continued to draw as heavily upon persons with their initial training in the region? If so, are there any implications for faculty appointment policy?

The study in 1955-56 included 17,749 faculty members in 225 accredited junior colleges, liberal arts colleges and teachers colleges, as well as the staffs of the arts and education faculties of 29 representative universities. By various tests, the sample of 284 institutions in 1955-56 appeared to be representative of the various types of institutions and of the various regions of the country.

In the 1955-56 study, data were available on 940 faculty members from 16 institutions within the Mountain region. Of the 940 faculty members a total of 367, or 39%, had received their baccalaureate degrees from institutions within the Mountain region. Even when adjustments were made for those teaching in the junior colleges within the region, approximately 38% of the four-year faculties had receive baccalaureates from colleges within the region.

The study for 1970-71 includes 2,364 faculty in 12 Colorado colleges and universities. Data provided by the 12 institutions included for each faculty member such information as: name, rank, teaching field, sex, date of birth, name of institution from which bachelor's, master's, and doctorate's degrees were received and the date on which bachelors, master's, and doctorate's degrees were received. Additional information on the characteristics of each of the institutions, both the baccalaureate-granting institution and the employing institution was available on a tape provided by the U. S. Office of Education, information such as size, control, location, and type of program for each of the institutions listed in the Office of Education directory.

A second portion of the 1970-71 study is based upon a sample of slightly over half of the faculty included in the initial population. Questionnaires requesting information on previous positions and reasons for accepting the current position were sent to all faculty members in the 12 colleges and universities. Of the 2,364 questionnaires mailed, a total of 1,240 replies were received, a return of slightly over 52%. Since some of the information on the faculty questionnaires was duplicated in the data provided by the institutions, it was possible to compare individuals who provided information with the total population. In most respects, the sample responding to the questionnaire reflects adquately the total Colorado faculty population.

Among the Colorado faculty for 1970-71, just under 30% (29.8%) of the baccalaureate degrees were from institutions in the Mountain region. And of the total, 24% of the baccalaureates of the Colorado college and university faculty were earned in colleges and universities within the State of Colorado.

Does the difference in percentage from 1955-56 for the Mountain region (38%) and 1970-71 for Colorado (30%) represent a significant change in the sources of faculty for Colorado institutions? Part of the difference between the two percentages may be, of course, due to the lack of direct comparability of the two samples. Only Colorado faculty are included in the 1970-71 study, while a sample of the faculty in the entire Mountain region (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) were included in the 1955-56 study. Further analysis of data, however, would suggest that the differences in the two samples would not seem to account for all of the differences in the percentages.

There was some variation among the Colorado institutions. Just over 26% of the baccalaureates in the private institutions were from colleges in the Mountain region, while slightly over 31% of the baccalaureates in the public colleges were from colleges in the Mountain region. Within each group, however, the spread was broad, ranging among private colleges from just over 18% to over 39%, and ranging from public colleges from just over 18% to 47%.

If one combines the Pacific (California, Oregon, Washington), the Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming) and the West-South Central (Arkansas, Louisiana, Oklahoma) into a single large West-Southwest region, it may be observed that in 1955-56 just over 51% of the Mountain states faculty had received baccalaureates from institutions within this larger region. In 1970-71, 45.5% of the baccalaureates in Colorado institutions were from this larger region.

By adding the West-North Central region (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota) we have all of the states west of the Mississippi. In 1955-56, over 73% of the baccalaureates among faculties within the Mountain region were from institutions located west of the Mississippi. While at both periods of time large portions of the faculties in the Mountain region and in Colorado, respectively, had received their initial training within the western part of the country, there appears to be a slight decrease in the percentage for the 1970-71 sample.

A further analysis was made of the Colorado faculties of 1970-71 to determine whether those who had received their baccalaureates from Mountain region colleges differed from the total sample as to time at which the baccalaureate degree had been received. For the total Colorado faculties, approximately 25% received their baccalaureate in 1960 or later. On the other hand, among those who had received their baccalaureate degree from colleges within the Mountain region, just over 30% had received their baccalaureates in 1960, or later. It would appear that persons receiving their baccalaureates from institutions within the Mountain region and currently teaching in Colorado institutions represent a slightly "younger" group than the faculty as a whole. At least, more of them have received their baccalaureates in recent years.

Sources of master's and doctor's degrees for the Colorado faculties were analyzed in a similar manner. Table I summarizes the percentage of degrees of each type reported by the Colorado faculties of 1970-71. Note that nearly 65% of the baccalaureates were received from institutions west of the Mississippi, approximately the same percentage of master's degrees were from the same region, and well over half of the doctorates were earned in institutions west of the Mississippi.

TABLE I

PERCENTAGE OF DEGREES (BACHELOR'S, MASTER'S, DOCTOR'S) RECEIVED BY 1970-71 COLORADO COLLEGE AND UNIVERSITY FACULTIES FROM INSTITUTIONS LOCATED IN DESIGNATED REGIONS OF THE UNITED STATES

Degree	Colleges and Universities from Which Degree Received			
	Percentage from Colleges in Colorado	Percentage from Colleges in Mtn. States	Percentage from Colleges in Mtn., Pacific, West-South Central	Percentage from Colleges West of Mississippi
B.A.	24.1	29.0	45.5	64.9
M.A.	29.2	36.0	51.1	64.7
Ph.D.	17.5	23.0	41.6	54.6

When one examines the location of the institution from which the degree was received and relates this to the time at which the degree was received, another pattern emerges. Table II shows the distribution for bachelor's, master's, and doctor's degrees. Note that approximately 25% of the baccalaureates for Colorado faculty were received in 1960, and later, but for those who received their baccalaureates from within the Mountain region, approximately 30% were received in 1960, and later.

Among the 1970-71 Colorado college and university faculties, 43.5% of the masters degrees were received in 1960 or later. On the other hand, among those receiving masters degrees from colleges within the Mountain states, 68.1% were received in 1960 or later. Thus, while only 36% of the masters degrees among Colorado faculty (see Table I) are from institutions within the Mountain region, a large portion of those degrees represent persons who have received their masters degrees within the last decade. Colorado faculty members who have received their masters degrees from institutions within the Mountain region again appear to be the "younger" faculty.

The situation for doctorates, however, is rather different from that for bachelors and masters degrees. Note that while 23% of the doctorates in Colorado institutions are from institutions within the Mountain region (see Table I) only 34% of those in the Mountain region are recent doctorates, that is, doctorates earned in 1960 or later. On the other hand, for the total Colorado faculty, over 60% of the doctorates were earned in 1960, or later. Does this suggest that Colorado institutions have been able to attract persons with doctorates from institutions outside of the region in recent years? Does this suggest a somewhat better competitive position for Colorado institutions recruiting faculty in recent decades?

From the individual questionnaires, representing about 53% of the total faculty, several generalizations may be made. The sample is fairly representative. In terms of age of respondents, the sample is proportionate to all groups except for 70 years and above. The total faculty is 82.7% male, while the sample of 84.1% male. The sample is somewhat light (64.5 versus 69.9) for those receiving baccalaureates in 1920-29 and (66.7 versus 69.9) for those receiving baccalaureates in 1960-69.

TABLE II

COMPARISON BETWEEN THE DECADES IN WHICH BACHELOR'S, MASTER'S, AND DOCTOR'S DEGREES WERE RECEIVED BY THE TOTAL FACULTY IN SAMPLE AND BY THOSE FACULTY MEMBERS RECEIVING DEGREES FROM COLLEGES WITHIN THE MOUNTAIN STATES

Decade in Which Degree Received	Bachelors Degrees		Masters Degrees		Doctors Degrees	
	Percentage of Total Faculty	Percentage for Faculty Receiving Degrees from Institutions in Mountain States	Percentage of Total Faculty	Percentage for Faculty Receiving Degrees from Institutions in Mountain States	Percentage of Total Faculty	Percentage for Faculty Receiving Degrees from Institutions in Mountain States
1910-19	0.1	---	0.1	---	---	---
1920-29	2.7	3.3	0.9	---	---	---
1930-39	13.4	11.6	7.1	2.2	3.6	5.9
1940-49	22.0	18.8	15.3	2.8	7.1	13.7
1950-59	36.9	35.3	33.2	26.6	29.4	47.2
1960-69	24.8	29.4	43.3	64.8	58.3	34.2
1970-	0.2	0.7	0.2	3.8	2.1	---

Faculty in the sample were asked to give a ranking for reasons for joining the faculty of the institution in which they are now teaching. Rank order, together with the total responses is as follows:

1. Location - 928
2. Preference for this type of college or university - 755
3. Family preference - 384
4. Other - 342
5. Salary Advancement - 317
6. Provided first opportunity of teaching - 299
7. Reputation of the department - 295
8. Standards of the college or university - 295
9. Research opportunity - 281
10. Advancement in rank and/or title - 267
11. Reduced class load - 158
12. Less administrative work - 131

Location and type of institution were recorded most frequently for all of the institutions in the sample. The only variation was that 4 of the 12 institutions ranked type of institutions slightly above location.

"Family preference" was fairly standard among the 12 institutions as the third most often indicated, although in one institution "research opportunity" was ranked third, and in three institutions "standards" were ranked third, and in two institutions "salary advances" were ranked third. In the remaining 6 institutions, "family preference" was the third in rank.

Previous work experience was examined only in terms of previous teaching, although in a subsequent report a further breakdown will be provided. Approximately 46% indicated that the position held prior to the present one was a teaching position. Interestingly enough, 68% of those whose previous positions was a teaching position had taught in an institution offering doctoral study. Nearly 84% had taught in an institution offering master's or doctor's level study.

APPENDIX B

INDIVIDUAL FACULTY RESEARCH PROJECTS

Research Projects Done At
Colorado College

Researcher: Tom K. Barton, Associate Professor of History

Research Title: The Impact of Classical Education on American Social and Political Presuppositions in the Nineteenth Century.

Research Duration: Summer 1969

Budget: $750

Contribution to Education: To prepare (in part) an undergraduate seminar and stimulate student thought about rhetoric and its place in the understanding of history.

Objectives: To examine printed and manuscript autobiographies of lawyers, educators, politicians, and famous public speakers to try to fathom their own attitudes toward rhetoric and its place in public life.

Results: In this preliminary investigation, not by far complete, I did begin to discern some differences in regional patterns--between new England and the South, for instance.

Dissemination: Two all college lectures September, 1969 at Colorado College.

Researcher: Alvin Boderman, Sociology Department

Research Title: Determinants of Institutional Loyalty: Alumni and Their College

Research Duration: June 1970 to September 1971

Budget: $1,200

Contribution to Education: Continuing Alumni support in a variety of ways for their college is important in the continuing life of the colleges. The findings of this study might be generalized to other small liberal arts colleges.

Objective: To discover factors which create insitutional loyalty.

Research Plan: During the summer of 1970, I will construct a research design based entirely on information presently available on alumni in the offices of the Alumni and Registrar at Colorado College. Among the factors to be considered are---

A. Conceptual and operational definition of alumni loyalty
B. Educational experiences which may be related to alumni loyalty
    1. Academic success
    2. Extra-curricular activities
    3. Personal sacrifices made by a student for his college education, e.g. accumulation of loans
C. Experiences after graduation
    1. Rewards which may have been associated with graduation from Colorado College, e.g. economic success
    2. Reinforcement of initial involvement with Colorado College, e.g. marriage to another Colorado College graduate
    3. Marriage and a family

The data collection and analysis will be done during the 1970-71 academic year. Based on the results of this initial study, I would like to design a second study in the summer of 1971 to collect additional information through a questionnaire sent to a sample of Colorado College Alumni. This second investigation would deal with subtler variables which may be related to alumni loyalty such as---

A. The presence or absence of a particularly rewarding relationship to a faculty member
B. Liberal or conservative political ideology
C. Awareness of change in the image or nature of the College.

Results: A final report has not been received as research is continuing.

Researcher: Slawomir A. Grzelkowski, Department of Sociology

Research Title: Innovative Decision Making in a Collegial Organization

Research Duration: April 1970, in progress

Budget: $2,000

Contribution to Education: The most specific relevance, is for the problems of larger state educational innovation and administration of higher education. The context of rather widespread perceptions of crisis in the institutions of higher education of and equally widespread but usually unsystematic attempts at change, a study of the processes of innovation in a college, whose design for change goes much further than the traditional tampering with curricula and includes not only significant departures from the prevailing style of teaching and learning but also a comprehensive redesign of the total organizational structure, presents a set of usual opportunities. There are theoretical reasons to believe that the final outcome of that redesign of the college's structure will constitute a model of change not only for other educational organizations, but--in a certain way--a model of the bureaucracy of the future.

Objectives: To explore the structural dimensions of one type of a professional organization (a collegiate one), in the conceptual dimensions of professionalism and professional role orientations, in the study of relationships of value systems of "academic men" to the specific action program (a behavioral dimension), in the larger area of planned change.

Results: The research will utilize field methods of studying organizations. Survey techniques (concretely, the inverviews) will be the main method of data collection, supplemented by analysis of documents and by limited use of participant observation. The survey will focus on behavior of individuals in organizational structure, as opposed to "polling" of opinions of individuals without regard for the social context.

To date; a theoretical background of the project and an interview schedule to be used in data gathering have been completed. Pretest interviews are being conducted.

Dissemination: A paper, "Innovative Decision Making in a Collegial Organization--An Outline of a Theory" was given at the annual meeting of the Rocky Mountain Social Science Association in Fort Collins, Colorado, May, 1971.

Researcher: Inez Henry, Graduate Assistant

Research Title: The Traditional Ballads in Chile and their Relationship with the Ones in Spain

Research Duration: Fall 1968

Budget: $250

Contributions to Education: Information regarding Ballads in Chile and copies of these are not generally available for comparison. Significant in Music Education.

Objectives: To xerox articles from periodicals and portions of rare books in Chile to provide materials to the music department otherwise unobtainable.

Results: These materials are available to the music department at Colorado College. Comparisons were made.

Researcher: Mark Lansburgh, Graduate Assistant

Research Title: Defining the "School of Illumination"

Research Duration: Fall 1968

Budget: $250

Contributions to Education: Availability of copies of otherwise unobtainable illuminated manuscripts from European Libraries to allow examination and study by students.

Objectives: 1. To make photographs of illuminated manuscripts in European libraries as a part of an attempt to define a hitherto unascribed "School of Illumination" centered in San Pedro de Cardena in Spain. 2. To make these available for examination and study.

Results: Objectives were carried out.

Research Projects Done At
Loretto Heights College

Researcher: Antoinette Doyle (S.L.), Associate Professor of Philosophy
Christopher Gillespie (S.L.), Dean of Off-Campus Programs

Research Title: ECQ and CUES Environmental Impact as Related to Long-Range College Planning, 1970-1980.

Research Duration: First Phase - April 1970 to December 31, 1970

Budget: $900

Contribution to Education: It is assumed that a small liberal arts college has a student population which is intellectually aware and socially concerned, with a cohesiveness in faculty-student relationships and atudent-student relationships. The validity of this assumption will be tested by the Experience of College Questionnaire (ECQ) and College and University Environment Scale (CUES). If curriculum flexibility, housing arrangements, library facilities, cultural program, etc., contribute positively to student perception of the college environment, then response to CUES will indicate this perception.

Objectives: To gain objective evidence from students on their perception of the college environment through the use of the two instruments, ECQ and CUES. This information will then be considered in making decisions affecting the college environment by the Long-Range Planning Committee. Furthermore, through comparison of the answers to both scales with responses from students on other college campuses, the assessment of the intellectual climate, social awareness and interpersonal relationships within the college community will indicate how these factors are affected by the particular college setting. Ways will then be sought to increase positively the intellectual climate, social awareness and interpersonal relationships.

Results: The CUES test were administered to a selected sample of 100 sophomores, juniors and seniors in May, 1970. The tests were scored and a profile projected for this sample. Scores for Loretto Heights College were compared to the national norms and to the Loretto Heights College profile from the administration of this same test in 1966-67. An interpretation of the data was made, as well as an analysis of the individual items in the test.

The ECQ was administered to a selected sample of 183 different students, members of all four classes at the same time as the CUES test was done. These questionnaires were tallied and a study of the correlation of this test with CUES is still in process. A follow-up survey will be done 1973, 1976, and 1979.

Researcher: Sister Margaret Grace Elsey, Professor of Mathematics

Research Title: Computing and Mathematics Curriculum Project

Research Duration: February 1970 to May 1970

Budget: $715

Contribution to Education: Development of syllabi in various mathematics courses (introductory liberal arts course and calculus) which include sound and relevant mathematical concepts and exploit the computer as a pedagogical device for introducing and/or developing these concepts.

Objectives: 1. Development of syllabi for the liberal arts mathematics course and the calculus courses.

2. Comparison of the student reaction to the use of the computer through a remote terminal with the reaction to the use through "batch work."

Research Plan: **Topics usually included in the courses (MA 100 and MA 220) will be presented where possible with the computer as an aid and additional topics which are suggested by the availability of the computer will also be included in the course. Records of the units taught will be maintained and completed student projects will be collected. A diary of student reactions will be kept. Evaluation forms will be administered and a comparison of reactions from a group who have experienced usage of the computer both through terminal and card usage will be made as well as a comparison of the reaction of a group whose first experience with the computer was through terminal usage with the reaction of another group whose first experience was through "batch work".**

Results: Results not available at this time.

Researcher: Paula Fischer, Student Personnel Services Department

Research Title: Walsh Hall Living-Learning Centers: Overview and Evaluation

Research Duration: Academic Year 1970 to 1971

Budget: $1,385

Contribution to Education: The Walsh Hall Living-Learning Centers at Loretto Heights College attempt to make a contribution to education by providing a framework for integrating the instructional, intellectual, and residential elements of collegiate living thus emphasizing two basic educational principles: 1) Learning is a total process and 2) Students do learn and relate value through a series of unique and purposeful educational experiences.

Objectives: 1. To assist in providing an environment within the residence hall which will be conducive to personal growth and maximal intellectual stimulation.

2. To provide the opportunity for faculty-student contacts other than the classroom situation to the end that learning experiences are enhanced.

3. To promote an atmosphere of warmth, high morale, and an appreciation for the values and opportunities available in the total institutional environment.

Research Plan: The Walsh Living-Learning Centers refer to the three wings of the Residence Hall that have been designed to develop, implement, and evaluate a common educational program designed to complement the existing college curriculum by providing a more favorable climate for learning and for expanding students opportunities for individual growth. The project itself has employed pre-post type comparisons involving experimental and control groups. Collected data will be compared and analyzed for purposes of 1) determining the general effectiveness of the living learning programs in each of the units; 2) identifying areas of strength and weakness; 3) listing recommendations for the its improvement, and 4) determing whether or not it is desirable and feasible to continue the project and extend it to the other residence halls on campus.

Results: Testing was done, but due to entry and exit from the program and the college were unusable. The program was judged by participants as very successful in developing relationships, effective group functioning, and responsibility for learning. Some students felt the course was worthless and indicated they were unable to function in the atmosphere of freedon. Many recommendations were made to change any new attempt at a similar project.

Researcher: Sister Jane Godfrey, Professor of Education

Research Title: The Development of a Scale for Measuring the Religious Development of Four- to Six-Year-Olds.

Budget: $259

Contribution to Education: There are scales for measuring the intellectual, the social, the emotional, the language development of children. No one has developed a scale for measuring the religious development of children.

Objectives: To develop test items which will sample adequately the religious behavior of young children, aged 4 to 6, eliciting spontaneous as opposed to learned religious thinking.

Research Plan: A sample of six groups of 30 children aged 4 to 6 was selected. To each group was administered a set of similar but different items eliciting their religious thinking. The items were then rated according to their ability to elicit spontaneous religios thinking as opposed to learned religious thinking. The items receiving the highest ratings are retained in the final scale which will be validated and factor-analyzed on another sample of children.

Results: Results not available at this time.

Researcher: Sister Marie Catherine Pohndorf, Associate Professor of English

Research Title: Creativity Project: Use of Short Films for Freshman Writing Labs

Research Duration: September 1968 to September 1969

Budget: $491

Contribution to Education: 1. Partial examination of the effect of a new educational media upon student performance in class

2. Use of a new kind of test.

Objectives: To study the effects of short films upon the creativity of a selected group of Freshman English students.

Research Plan: Six classes taught by four instructors were included in the project. Each was a heterogenous group, assigned by computer, of approximately 25 students. Group A taught by teacher A and Group B taught by teacher B did not use films in teaching; Groups C and D taught by teacher C (the investigator) did use films consistently; Groups E and F taught by teacher D used films occasionally. The Torrance Tests of Creative Thinking, Form A, were administered by the investigator to all six groups the week of September 5, 1968. Form B of the same test was administered during the week of December 5, 1968. Evaluation of data received was measured by a t test devised for the project by Dr. Zelkind of the Psychology Department.

Results: Results were not available at this time since researcher is on sabbatical.

Researcher: Jeanne d'Arc Schleicher, S.L.
Professor of Biology

Research Title: A Proposal for Preliminary Investigations for Curriculum Development for Environmental Studies and Sciences

Research Duration: April - June, 1971

Budget: $1,586

Contributions to Education: Development of a curriculum for Environmental Studies and Sciences at Loretto Heights College. As a response to need for colleges and universities to respond to the environmental crises in their educational programs.

Objectives: 1. To identify general environmental problems, areas, or tasks to which Loretto Heights College could contribute by preparing students who are motivated and educated to work toward solving interrelated environmental problems. 2. To assess the specific resources within the local community with respect to problem-solving study and off campus experience for students in the environmental program. 3. To measure the support and probable commitment to such a program by students, faculty, administrators, and trustees. 4. To determine what financial support is available from the funding agencies for curriculum development, implementation and validation. 5. To select a coordinator for curriculum development.

Research Plan: 1. Locate and document needs in the areas of teacher, education, public health, social welfare, urban planning, conservation and government agencies concerned directly with the environment.
2. Assess the role of the local community as a resource in environmental study. 3. Measure campus support by questionnaire, group meetings and/or individual interviews. 4. Refer findings to an advisory committee to analyze and evaluate data and formulate conclusions relative to the objectives. 5. If positive need found final phases will be carried out.

Results: A final report has not been received as research is continuing.

Researchers: Joseph Sprug, Professor and Librarian
Irving Zelkind, Ph.D., Professor of Psychology

Research Title: Increase in Research and Course Offerings in the Study of Time as a Function of the Availability of a Comprehensive Reference Work

Research Duration: March 1971 to March 1972

Budget: $1,140

Contributions to Education: A systematically constructed comprehensive reference work providing easy access to the research in the field of Time Perception would stimulate more research and would greatly aid in introducing courses or sections thereof dealing with Time Perception.

Objectives: To publish a systematically constructed comprehensive reference work in the field of Time Perception.

Research Plan: Phase 1 of this proposed research project would be concerned with the collecting and abstracting of 1,000 published studies in the field of Time Perception. The studies will be organized according to the dependent and independent variables utilized. Indexes and cross references will be provided so that each study is accessible through several keys, e.g., author, journal, chronology, and frequency of citation.

Phase 2 will determine by statistical analysis the effect of this work on the production of research in Time Perception and the introduction of courses in this subject. The number of articles published and the number of courses offered subsequent to the availability of the reference work will be compared to the pre-publication figures. The statistical procedures to be used will include trend analysis and regression analysis.

Results: A final report has not been received as research is continuing.

Research Projects Done At
Regis College

Researcher: Janay Y. Downing, Ph.D.

Research Title: Study Methods of Superior Students

Research Duration: August 1971 - December 1971

Budget: $380.55

Contributions to Education: A study done of methods of productive study habits would be of value to students who would like to learn these habits.

Objectives: To study the study habits of successful students and incorporate the resulting information into a study guide written for students in student jargon.

Research Plan: Not submitted to date.

Researcher: John L. Flood Harold L. Mansfield

Research Title: A Study of Listening Effectiveness of Xerox Corporation Listening Skills Program

Research Duration: Spring and Fall 1970

Budget: $1,195

Contribution to Education: This would provide an experimental test of the program's effectiveness since the program is widely used in colleges and universities.

Objectives: The Xerox Corporation has introduced a training program which, they say, improves listening efficiency greatly. One of the frequent problems which confronts the college student who is performing at an inadequate level is the inability to listen carefully to what is said in class both with regard to assignment instructions and with regard to lectures. The purpose of this study will be to test the effectiveness of the Xerox program with regard to listening efficiency as reflected in improved performance in low grade point average (GPA) students.

Research Plan: The co-directors will evolve a study skills workshop of which the listening skills program will be an integral part. The participants will be 40 Regis College students drawn randomly from the low GPA student population at Regis College during the spring semester, 1970. As part of the study skills workshop, the Xerox Corporation's Listening Skills Program will be presented as the independent variable task for the 20 subjects in the experimental group. For the 20 subjects in the control group a standard lecture on listening skills will be given in lieu of the Xerox program as part of the total study skills workshop.

The two groups will meet on different days of the week, i.e., two hours per week for five weeks. Every effort will be made to equate the experiences of the two sections except as noted above.

Results: A final report has not been received as research is continuing.

Researcher: Daniel Lynch

Research Title: Evaluation of use of Summer Program by Non-Admitted Marginal High School Students

Research Duration: Summer 1971

Budget: $325

Contribution to Education: Attempts will be made to recommend a pattern for a summer program study for marginal students.

Objectives: 1. To evaluate the uses by marginal students of the summer program to prove academic capability.

2. To examine ways in which this preview of college affected their course progress or lack of some.

3. To recommend how summer program study for marginal students can be formalized as an institute in which these will be learning impacts.

Research Plan: Examination of: 1) Similar programs tried elsewhere in Colorado, notably at the University of Colorado and Colorado State College, 2) The Regis Summer Institute as it was originally proposed, 3) The Regis plan as it was put into practice during the 1970 summer session, 4) Case histories of the 1970 participants in the Institute indicating their perforance during and after participation in the program, 5) Evaluations of the program by students, faculty members, and administrators, specifically members of the admissions and counseling staff. I will evaluate the program as a participant. and 6) Suggestions by all above mentioned individuals as to whether the program should continue. If so, how can it be improved?

Results: A final report has not been received as research is continuing.

Researcher: Donald L. Salmon, Department of Government

Research Title: An Exploratory Study and Planning for Academic Internship Programs and Project Methods for Assessment and Measure

Research Duration: Summer 1970 to Spring 1971

Budget: $460

Contributions to Education: A study of the benefits to student learning in an internship setting should be meaningful to all colleges and universities.

Objectives: Arguments used to support the internship concept are: 1) It equips the students with dimensions of reality that they simply cannot encounter in or through conventional instructional techniques or methods, and, as such, adds raw perspectives to their view of things. 2) It brings more meaning to the educational process. 3) Much useful research can be done. 4) Because it helps to narrow the gap between the "can" and the "ought" it contributes to more responsible education. 5) With internship arrangements students are generally convinced that this is a means of keeping educational effort relevant, up-to-date, and in-tune. 6) There is also the consideration of publicity value. These aspects will be evaluated.

Research Plan: Two students under the direction of an instructor in the history department will make a survey of existing studies, establish contacts for student placement and survey and forestall possible problems in the system.

Results: The study is complete and has resulted in implementation of one internship program in State and Local Government. Next year (1972-73) the internship program will be broadened to include more students and agencies.

Researcher: Donald L. Salmon, Department of Government

Research Title: Perceived Goals of Administrators, Faculty and Students

Research Duration: Spring and Fall 1971

Budget: $700

Contribution to Education: If differences in goals by the different campus groups are discovered, some action might be taken to make differing goals known so causes of friction might be better understood.

Objectives: To ascertain the degree of agreement among administrators, faculty and students on matters relating to goals, and then to see if the perceived goals and patterns of governance are congruent with goals articulated in department and college publications, and the actual patterns of governance as near as the latter can be discerned from objective evidence.

Research Plan: 1. Gross-Grambsch questionnaire (with adaptation by Zimmerman) distributed. 2. Examination of publications. 3. Observation.

Results: A final report has not been received as research is continuing.

Researcher: Donald L. Salmon, Department of Government

Research Title: A Study of the Religious Affiliation of Presidents of Private Colleges and Universities

Research Duration: Fall 1970 and Spring 1971

Budget: $140

Contributions to Education: A description of the aspect of the college presidents life could have meaning in the understanding of social changes in the sectarian religious colleges.

Objectives: To investigate an aspect of the selection of college presidents now and in five years to see if there has been movement, or if the presidents are of the same religious affiliation as that of the college they head.

Results: This project went well beyond a study of religious affiliations of presidents of private colleges and universities. It examined career origins, educational backgrounds, career mobility. As an examination of the occupational and geographical origins, education, and career mobility of college presidents, it not only provided interesting information on this important occupational elite, but it also furnished further evidence of the relative fluidity or rigidity of our American society in filling such key leadership positions with persons from all occupational levels. In general I found that academic presidents have moved vertically through the social and educational hierarchies to their present positions. During their careers, I found that they have had a variety of professional experiences as teachers and academic administrators.

Researcher: Donald L. Salmon Harold L. Mansfield

Research Title: Evolving a Study Skills Program

Research Duration: Fall 1970 to Spring 1971

Budget: $620

Contribution to Education: By adapting the procedures used in a commercial reading skills program to the needs of college students. It is hoped that materials and course could be developed to help the student with a low GPA due to difficult reading skills.

Objectives: To evolve and institute a study skills program molded to the needs of the Regis Student Body.

Research Plan: Two researchers will attend a full course of study at a Commerical Reading Skills program and extract, modify, and unify those aspects of the program which offer the greatest potential use by college students.

Results: A final report has not been received as research is continuing.

Researchers: Donald Salmon
Harold Mansfield

Research Title: Faculty Commitment and Perceived Teaching Effectiveness

Research Duration: May 1970 to December 1971

Budget: $245

Contributions to Education: By testing McKeachie's (1963) thesis at the college and university level, "Teacher Satisfaction" is one of the key dimensions which effective teachers possess. No substantive data has been advanced to date.

Objectives: To study the relationship between the individual teacher's enthusiasm for teaching and his dedication to his content area and his perceived effectiveness, as a teacher, by students.

Research Plan: 1. Two questionnaires will be evolved. The first will be designed to assess the individual faculty member's commitment to teaching and to his chosen area. The second will be designed to assess student attitudes regarding the faculty member's teaching effectiveness. 2. The questionnaires will be administered. 3. A number of analyses of the data will be made: (a) The questionnaire will be analyzed for internal reliability; (b) the faculty data will be factor analyzed to determine if significant proportions of the variance can be accounted for through a limited number of factors; (c) the student data will be factor analyzed to determine if a limited number of factors can account for the major variance; and (d) correlations will be run to determine if instructors with high commitment to teaching and to their chosen field are viewed by students as more effective teachers than those with low content and teaching commitment scores.

Results: A final report has not been received as research is continuing.

Researcher: Kenneth C. Seidenstricker, Department of Economics

Research Title: Development of a Program of Studies for Special Students

Research Duration: Fall 1969 through Fall 1970

Budget: $600

Contribution to Education: A program of studies in the Division of Commerce and Finance which will offer educational opportunities which are not readily available in the "multiversities" to the gifted and disadvantaged student.

Objectives: 1. To develop a special program of studies aimed at serving the needs of special students, both gifted and disadvantaged.

2. To provide several "hard" proposals for change in the curriculum or in instructional techniques to the faculty of the Division of Commerce and Finance for their consideration in the spring term of the 1969-70 school year.

Research Plan: 1. Conferences with Professor Benjamin S. Bloom at Stanford about teaching technique, and Professor George L. Bach of the American Economics Association.

2. Consideration of such programs as coordinated Freshman-Sophomore programs teams taught on Economics, Business and Society, Business Communications, etc.; special sectioning; and tutorial programs.

3. Research into similar programs, alternative programs. The investigation of mechanics in implementation, costs and outside funding.

Results: A final report has not been received as research is continuing.

Researcher: James Wright Sr. Laetia Slusser

Research Title: An Investigation of the Inter-relationships of Religion/Theology and Politics

Research Duration: Summer 1971

Budget: $1,100

Contribution to Education: Insights gained about dealing with set or fully developed attitudes and their change or modification can be used in the educational process of college students, part of whom have highly developed attitudes relating to problems that reflect these interrelationships and part of whom have only partially developed attitudes.

Objectives: To measure interrelationships attitudinally of religion/theology and politics as they are believed to exist in or on many contemporary problems, e.g., abortion, support for migrant programs, government support for abortions, and other areas of controversy.

Research Plan: To conduct a seminar in religion/theology and politics. The seminar would consist of college students and adults outside of college. An attitude scale will be developed. At the end of the seminar consisting of 15 two-hour sessions spread over 15 weeks, another scale will be administered.

Results: A final report has not been received as research is continuing.

Research Projects Done At
Southern Colorado State College

Researcher: William G. Buckles
Chairman, Department of Anthropology

Research Title: To Provide Students with Opportunities to Acquire Research Methodology in Investigating Some Key Archeological Sites

Research Duration: Summer and Fall 1971

Budget: $800

No further information is·available at this time.

Researcher: Rick M. Gardner, Ph.D., Assistant
Professor of Psychology

Research Title: Application of Signal Detection Theory to the Study of Recognition Memory

Research Duration: June 1, 1971 to June 1, 1972

Budget: $950

Contributions to Education: To attempt to better understand the process of learning and retention of verbal material has, I believe, obvious educational relevance. The present research is also attempting to investigate how different rates of forgetting occur with differing levels of meaningfulness.

Objectives: An attempt is being made to apply the principles of signal detection theory to essentially a learning task. The theory offers certain methodological advantages over other procedures commonly used in research on memory and human learning.

Research Plan: Subjects are being presented lists of words for brief intervals of time and later tested for recognition memory. Major independent variables include presentation time, meaningfulness of material and criterion changes in subjects. The theory allows the separation out of two dependent variables; a measure of signal intensity (d') and subjects response criterion (=c). Changes in both these measures will be measured under various conditions, as stipulated above.

Results: A final report is not available at this time because research is continuing.

Researcher: Joan C. Gorden, Ph.D.
Instructor of Psychology

Research Title: To Re-examine the Effects of Varying Self-Other Blame Conditions on Children's Instrumental Performance in a Response Interruption Situation as it is Affected by Social Class Status and Intra-Task Interval

Research Duration: Summer and Fall 1971

No further information is available at this time.

Researcher: Lee Gerhard, Assistant Professor of Biology

Research Title: Comparative Study of Fossil and Modern Marine Algae

Research Duration: March 1970 to September 1971

Budget: $700

Contribution to Education: The detailed laboratory studies will allow undergraduate students to acquire knowledge and experience in basic research techniques and ideas in a research area that has little published data and which should be regarded as a new and fertile area of study.

Objectives: The objectives of the proposed study are to culture marine algae in the laboratory, collect representative fossil algae, and with these data, to delimit the detailed depositional (life) environment of fossil algae. The researcher will gain valuable knowledge in an area of investigation of geology that has very few workers and in which there is a distinct lack of published research. Students will gain knowledge of basic research techniques and problem solving methods.

Research Plan: Culturing of the modern forms in the laboratory will give maximum opportunity to study their morphology and secretions and to preserve specimens of particular interest. Collections of fossil forms will provide the necessary comparison forms for correlation between the modern and fossil groups. This would allow taxonomic systemization of the fossils, which have not yet been successfully classified. With this correlation between modern and fossil forms, a detailed environmental interpretation of the fossil deposition can be accomplished. Further study of the petrographic nature of the fossilized algae may then lead to better exploration methods for natural resources.

Results: A final report has not been received as research is continuing.

Researcher: Joseph Giuliano, Instructor
Gael Gael Bennett, Instructor

Research Title: Exploration of Possibilities for the Use of Newer Processes and Media (Plastics) in a Classroom Situation (Advanced Sculpture, Design and Media Courses)

Research Duration: January 1970 to July 1970

Budget: $990

Contributions to Education: An expansion of materials and techniques in the sculpture area.

Objectives: To discover the possibilities of the use of newer plastics in advanced sculpture classes.

Research Plan: Construction of a former (vacuum and blow molder) to work with various plastics in 3-D, the use of multi-media with equipment and exploring various processes.

Results: Project was terminated without results.

Researcher: Scott J. Herrmann, Assistant Professor, of Biology

Research Title: Photo Orientation Instruction and Photo Slide Testing in the Teaching of Invertebrate Zoology (Biology 121) at Southern Colorado State College.

Research Duration: September 1970 to April 1971

Budget: $955

Contirbution to Education: An instructional program using slides that may overcome lack of specimens for teaching invertebrate Zoology.

Objectives: 1) Purpose: To determine to what extent photo orientation instruction and photo slide testing improve the student-product enrolled in invertebrate zoology (Biology 121). 2. Instructional up-dating is required in the teaching of invertebrate zoology laboratories (Biology 121) at SCSC. Reasons for making this statement are justified as follows:

a. In nearly all cases living marine invertebrates are not available for study.

b. With the exception of the author's personal invertebrate collection, preserved specimens in the SCSC collection are totally inadequate.

c. Many important invertebrate representatives are not a part of the SCSC collection.

d. No prior instructional aids expect manual photos and text diagrams are available for dissection procedures and orientation.

e. One dissection specimen per person is inadequate for a variety of reasons, e.g., improper preservation, sex, differential periods of reproductive activity, etc.

f. Makeup testing of unit laboratory practicums is near impossibility, since each practicum requires two to three hours of preparation.

Research Plan: An instructional program is necessary which will fill the voids and deficiencies delimited in the aforementioned section. Such a program would involve the use of 2 x 2 color slide transparencies for dissection-demonstration instruction at the beginning of each laboratory session, 8 mm film loops for behavior demonstrations of living specimens, and 2 x 2 transparencies for laboratory testing purposes. (Two laboratory sessions will be presented winter quarter 1971) one will be taught using the photo orientation-testing approach while the other will not. Identical terminal testing will be used to evaluate the two approaches.

The comparative results would be used in assessing whether or not such a photo orientation-testing approach could be used in other biology laboratory situations.

Results: A final report has not been received as research is continuing.

Researcher: Kent Holliday, Associate Professor of Music

Research Title: Recording Project: Adler amd Finney Piano Trios

Research Duration: July 1971 to December 1971

Budget: $508

Contributions to Education: Recording and disseminating new chamber music for the use of teachers and students. The discs will be made available free of charge to public libraries, college and university libraries, and music conservatories in the United States.

Objectives: To record the chamber works of two highly respected but little known American composers, Ross Lee Finney and Samuel Adler.

Research Plan: Project is to record the trio, press discs, and give the records away to college libraries around the country.

Results: A final report has not been received as research is continuing.

Researcher: James W. LaVelle, Ph.D.
Head, Department of Biology

Research Title: A Comparison of Audio-Tutorial Programmed Learning with Conventional Lecture-Laboratory Learning

Research Duration: Summer and Fall 1971

Budget: $500 from CORD

No further information is available at this time.

Researcher: Hallard T. Murray, Assistant Professor of Biology

Research Title: Development and Utilization of a Living Culture Collection for Research and Teaching at Southern Colorado State College.

Research Duration: June 1, 1970 to May 30, 1971

Budget: $605

Contribution to Education: One of the common handicaps for student research projects in small colleges (and high schools) is the lack of a wide variety of pure, identified cultures of living organisms for these projects. Students therefore often are forced to work on something which doesn't interest them. Ordering living specimens as the need arises is inefficient very expensive, and time consuming (cultures often take over a month to arrive). Some specimens are only available seasonally. One function of a college biology department should be to maintain a wide variety of living cultures for research and teaching.

Objectives: 1. To train two to four students in the maintenance, growth, and sterile transfer of living cultures of organisms useful for research and teaching.

2. To provide a source of pure, identified living cultures for use by qualified biology majors in indepencent laboratory research projects.

3. To provide a source of pure, identified living cultures for general biology students for their small quarterly research projects.

4. To provide a source of culture techniques and ideas for experiments for Pueblo high school biology teachers. Ultimately, perhaps, to even providing them with a free or at cost source of living cultures.

Research Plan: Two to four biology majors will be trained in the growth and maintenance of living cultures. In addition to the journals in the library, the diversified staff of the Biology Department will serve as a prime source of the information needed on techniques and methods. Living cultures will be maintained under conditions most suitable for optimum growth. To do this, cultures will be maintained in a variety of places--controlled temperature rooms, plant mobiles (lighted growth shelves), and greenhouse. The students maintaining the cultures will learn invaluable skills useful in research. They will develop a file containing cards on each species in the culture collection. These cards will contain information on the culture conditions required (light, temperature, nutrient media, transfer techniques, etc.) plus journal referenced for further information on techniques and ideas for research projects.

Results: A final report has not been received as research is continuing.

Researcher: John Lee Pisciotta, Ph.D.
Assistant Professor of Economics

Research Title: Glossary for Economic Literacy

Research Duration: August - September, 1971

Budget: $250

Contributions to Education: The Glossary for Economic Literacy will supplement and to a large extent replace the reliance on textbooks and lectures for definitions of concepts and descriptions of economic institutions. Other advantages are: 1) It will add to the effectiveness of providing basic vocabulary since text and lectures often fail to provide succinct explicit definitions of terms; 2) Use of the glossary will free class time for more extensive treatment of economic subjects, applications of knowledge, class discussion, etc.; 3) The glossary will be available to the students for ready reference.

Objectives: To develop a Glossary for Economic Literacy to be used in introductory economics courses the importance of such a teaching aid relates to the general need for a glossary of economic terms and to its role in improving economic literacy.

Research Plan: The Glossary for Economic Literacy will be compiled by utilizing dictionaries of economics, textbooks, lecture notes, and journalistic publications. The existing economic dictionaries, such as those discussed above, will be examined for content relating to the basic core of economics and economic literacy. Textbooks of introductory economics will be used in a similar fashion. The author's lecture notes will be gone through to assure that the glossary will closely relate to his courses. Finally, various publications, such as the Pueblo Chieftain, Christian Science Monitor, Wall Street Journal, Time, Newsweek, and U. S. News, will be read with a conscious effort to encounter terms which are widely used in economic journalism but not by professional economists.

Results: A final report has not been received as research is continuing.

Research Projects Done At
Temple Buell College

Researcher: Dr. Helen Brush, Behavioral Science

Research Title: Significance of Collegiate Factors Such as the Major and Grade Point Average as Related to Post Graduation Occupation

Research Duration: 1970

Budget: $300

Contribution to Education: Correlation of these data could have significant implications for admission, curriculum planning, academic advising and career planning. It is anticipated that the results of this study will have special usefulness in future curriculum planning at this institution.

Objectives: 1. To complete data by sending letters to graduates who did not respond to questionnaire during 1968 North Central Accreditation.

2. To correlate data on the marital and occupational status of graduates of Temple Buell College for the years 1963 through 1969 with major, grade point average at graduation, scholastic aptitude test scores, scholarship aid given, employment while in college and foreign study.

Results: The total number of students graduated in these years was 728. Marital status was most closely correlated to length of time since graduation than any other factor. Twenty-four students reported Master's degrees and one a Ph.D. Several students reported they were finishing degrees in 1970. Majors ranked by total SAT scores were Biology, Psychology, Medical Technology, Philosophy, English, Theater, Sociology, Foreign Languages, Divisional majors, Music, Elementary Education, Family Studies, Art, History, American Studies, and Asian Studies. Psychology appeared to attract students with high scores in verbal and math. Biology majors had sufficiently high math scores to rank first in combined scores although they were sixth in verbal scores. Only one student was in each of the American/Asian study categories.

There is no inter-rank consistency between mean cumulative grade point averages for the years 1967-69 and mean SAT verbal or math or the combination compared by majors.

Researcher: Roy E. Connally, Assistant Professor of Psychology

Research Title: Evaluation of Individual Rate Program for Undergraduate College Courses.

Research Duration: May 31, 1971 to July 30, 1971

Budget: $1,131

Contribution to Education: During the fall and spring semesters of 1970-71, Temple Buell College offered a broad selection of courses in an experimental format. Under this format, students were presented with a clearly stated set of course objectives which they could complete at their individual rates and thus receive Credit for the course. There was no penalty for not completing the course in a prescribed time. It is hypothesized that this program provides a more favorable milieu for academic achievement than the traditional format of regularly scheduled lectures, quizzes, letter grades, etc. Research and dissemination of whether or not this hypothesis is empirically supported would be of great value and interest to the academic community.

Objectives: The objectives of the proposed research to analyze and publish an empirical evaluation, within the limits of available data, of the experimental course format offered at Temple Buell College.

Research Plan: Comparison of number of course units offered by professors and registered for by students for the fall and spring semesters will indicate any trend of favor or disfavor toward the experimental program.

The proportion of experimental course units completed will be compared with the proportion of traditional course units completed with grade of C or better. This will provide a view of academic achievement and, done for both semesters, will indicate any ongoing trend in such achievement. It is the long-range plan to collect and analyze these data over the following six semesters in an effort to observe any trends of academic achievement and preference free of novelty or halo effects.

Results: A final report has not be received as research is continuing.

Researcher: Elayne M. Donahue, Ed.D., Assistant Professor of Education

Research Title: An Experimental Approach to Combining the Content and Field Experience of Educational Psychology and American Public Schools (Required courses in the Teacher Education Tepartment)

Research Duration: February 1970 to December 1970

Budget: $750

Contribution to Education: To upgrade the teacher education program by making the required courses more relevant through the unifying common elements and to more efficiently use student time.

Objectives: 1. To avoid duplication in course work

2. To increase the understanding of the relationship between theory and field experience.

3. To make the course work more meaningful for the prospective teacher.

4. To facilitate valid course evaluation by the use of control and experimental groups.

Research Plan: The following procedure will be used during the two hour block to facilitate a better understanding of the total process under which teaching and learning take place: 1) video-taping of micro-teaching, 2) video tapes of master teachers, 3) class sessions taught by team teaching, 4) field experience consisting of working as a teacher's aide and observation in private schools, innovative schools and schools for the disadvantaged and those who require special education.

Results: A final report has not been received as research is continuing.

Researcher: Joan L. Dyer, Department of Physical Education

Research Title: A Comparative Analysis of Perceptions of Students Rights at a Four-Year Liberal Arts College

Research Duration: February 1970

Budget: $360

Contribution to Education: Identification and comparison of the differing perceptions of students' rights would lead to more understanding among the groups and perhaps clear away an obstacle to learning. The findings might be generalized to other similar campuses.

Objectives: To identify and compare perceptions of students' rights obtained from students, faculty, student personnel staff, administrators, and trustees.

Results: The sample groups used in this investigation consisted of 165 undergraduate women students identified according to class year, cumulative grade point average, and major division; 36 faculty members identified according to sex, age, and divisional status; 11 student personnel workers identified according to age; 23 administrators identified according to age; and 23 trustees also identified according to age.

The findings of the study appeared to justify the following conclusions with regard to perceptions of student rights at Temple Buell College:

1. Students' perceptions of what student rights should be at this particular college differ significantly from those of administrators and trustees, and this same difference is also found between faculty members and trustees. Students and faculty tend to be more alike in what they consider to be desirable student rights, and their more permissive viewpoint appears to be opposed to one more restrictive expressed by both administrators and trustees. Student personnel workers appear to be somewhere in the middle of this continuum in that only one instance of significant difference was found when this sample group was compared with each of the others.

2. Variables such as students' class year, cumulative grade point average, and major division do not relate to students' perceptions of student rights at Temple Buell College.

3. Neither sex nor divisional status of faculty members has any effect on faculty perceptions of student rights.

Researcher: Dr. John M. Love, Department of Psychology

Research Title: Children's Language Behavior in the Preschool

Research Duration: May 1970 to December 1970

Budget: $750

Contribution to Education: The findings of this study would be of use in the planning of language programs for young children and in teacher education programs. Samples obtained may be used as illustrative materials in college courses in child development.

Objectives: The purpose of the proposed research is to investigate the verbal behavior of four-year-old children in a nursery school setting. Verbal interactions between children in pairs, among several children when in a group, and between teachers and children will be selected for analysis. There are two basic objectives: 1) to see whether the young child's language usage differs when talking to the teachers and when talking to peers; 2) to see whether teachers respond differently to children's utterances than do other children.

Results: Due to the length of time used in developing adequate apparatus for recording children's speech, the study was not completed. The year was used in methodological problems.

The central purpose of this methodological study was to determine the effects (if any) that wearing a microphone would have on the teacher-child interactions. Four children were selected for study. Each child was observed (at different times) by two observers for 20 minutes a day to determine a) the amount of time spent talking, b) the amount of time the teacher initiated conversations with the child, and c) the number of times the teacher responded to things the child said. There were three phases to the study of each child: Phase I: First baseline. Before any apparatus was introduced, the child's verbalizations and teacher reactions were recorded until stable rates were obtained (this ranged from six to ten days for the four subjects). Phase II: Apparatus adaptation. The microphone and transmitter (enclosed in the pocket of an apron) were worn by the child throughout the observation period. Observers continued to record child's verbalizations and teacher reactions. This was continued for eight days. Phase III Second baseline. The apparatus was removed, the conditions of the first baseline repeated. This phase was continued until rates of responding again stablized.

Main findings: Observers can be reliable for these behavior categories. The average percent agreement was 97.7% for teacher initiations, 99.6% for teacher responses, and 92.4% for child verbalizations. The effect of the microphone was, in general, to decrease the amount of child verbalization and to increase the amount of teacher interaction. More observations will have to be made to see how long it takes the interactions to return to normal with the microphone on. The research will be continued.

Researcher: Dr. James Patterson

Research Title: The Unassimilated Greeks of Denver

Research Duration: August 1968 to November 1969

Budget: $250

Contributions to Education: To aid in understanding of a particular ethnic group and to contribute to anthropological and sociological assimilation theory.

Objectives: To study the group in question before they disappeared.

Results: This study looks at the existence of a group of Greek immigrants in Denver who have remained firmly unassimilated over a long period of years despite the movement toward assimilation on the part of many of their compatriots and the increasing Americanization of Greeks in Denver. The Greek community in Denver began around the turn of the century with immigrants who worked in the mines and on the railroads and who started many small businesses. Gradually, as their numbers increased and as they prospered, they moved in a southeasterly direction in the city, so that the majority of the 4,000 Greek-Americans now live in SE Denver. The original Greek Town, a complex of restaurants, coffee houses and related establishments, served the newest immigrant arrivals and the small number who remained unassimilated. The number of establishments began to decline in the 1930's and at the time of the study there were no restaurants serving Greek food and only one coffee house left (the entire area is now gone due to Urban Renewal). The kafeneion served the remaining unassimilated old men and also the few younger new arrivals. The old men had been largely unsuccessful financially, maintained close emotional orientation toward Greece, and were ambivalent toward U. S. culture. The study investigates the history of the Greeks in the U.S,, Colorado and Denver, and focuses on the habitues of the coffee house and the inhabitants of Greek Town and their peripheral relationship to the larger Greek community and church. It looks at their values and behavior, the life histories of selected kafeneion regulars, attitudes of the larger Greek community toward the area and its residents, conflict and factionalism within the group, glowback to the homeland, applicable acculturation and assimilation theory, and the future of the unassimilated Greeks of Denver and of Greek Towns in America.

Dissemination: Anthropological Quarterly, October 1970. Abstracted in Eastern New Mexico Contributionsin Anthropology, Winter 1971, and in Dissertation Abstracts, 1971.

Researcher: Daniel Lovelace, Assistant Professor of Political Science

Research Title: Taiwan and the Future of Sino-American Relations

Research Duration: August 1971 to September 1971

Budget: $480

Contribution to Education: Materials and information regarding the politics of modern China are difficult to obtain or non-existent in the United States. As a basis for classes taught which deal with Modern China, American Foreign Policy, and Sino-American relations with China this material would be invaluable. I plan to publish my interpretations of the material.

Objectives: To gather information and materials onthe following questions:

1. How important is the Taiwan Issue as an obstacle to better U.S. - China relations?

2. What are the current alternatives available for the solution of the "Taiwan Question"?

3. What additional alternatives might be explored by the various parties concerned, given a continued trend of rapprochement in Sino-American relations?

Research Plan: In late August of this year I will be travelling to Taiwan to help place and orient the first group of Temple Buell College Students attending the College's overseas Study Center in Taipei. I will collect information and materials there and in Hong Kong.

Results: A final report has not been received as research is continuing.

Researcher: Michael J. Preston, Professor of English

Research Title: Reading Classical Greek Made Easier

Research Duration: May 7, 1971

Budget: $500

Contribution to Education: Adapting and applying the already-developed methods for acquiring language skills to classical (Homeric) Greek.

Objectives:
1. Rapidly to develop recognition-skills
2. To practice those skills with selections from the *Odyssey* and *Iliad*
3. To make a basic transition to Attic Greek
4. To practice Attic reading skills on Euripides' *Cyclopes*.

The net result is an Attic reading ability roughly comparable with that developed in a traditional attic-centered course, and a Homeric reading ability as a bonus.

Research Plan: The aim of the project is to, within the context of a formal class, learn to read Homeric Greek as rapidly as possible. By using a tape-recorder in conjunction with a specially prepared text, it is hoped that the student will be sufficiently skilled to begin the Odyssey within ten weeks. Homer uses stock formulas and epithets with a frequency which should lend to rapid oral-visual reading. The transition to Euripides' Cyclopes should be relatively simple because Euripides leaned heavily on the Homeric source (in language and plot) for his play.

Results: A final report has not been received as research is continuing.

Researcher: Nikolai A. Safonov, Professor of Russian & German

Research Title: The Role of the Pluperfect in Contemporary German

Research Duration: June 1971 to December 1971

Budget: $500

Contribution to Education: The result of this research would constitute an important contribution to German language teaching in the classroom since it might lead to a simplification in the use of the past tenses, one of the more difficult subjects in the study of German grammar.

Objectives: The purpose of this study is to ascertain to what extent the pluperfect has penetrated the Standard German language, replacing the simple past or the present perfect tense.

Research Plan: A new development to be observed in modern German is the frequent use of the pluperfect where one normally expects the present perfect or the simple past. This practice has become more and more widespread during the last years, and is especially accepted by the mass media, including radio, television and the press. Interestingly, this phenomenon seems to be limited to West Germany.

Results: A final report has not been received as research is continuing.

Researcher: Harold A. Schofield, Associate Professor of History

Research Title: The Western World's Revolutionary Community: A Preliminary Study

Research Duration: June 10, 1971 to July 10, 1971

Budget: $800

Contribution to Education: We encourage a strict compartmentalization of knowledge by the way we structure disciplines and by the exclusiveness with which we pursue subjects that need not be so exclusive. Students preserve the compartmentalization in their thinking. This project to study the relative cosmopolitanism of the 19th century revolutionary and radical political figures will help to break down the artificial barrier which separates American from European history. If the student could view revolutionary thought as commonly held by Americans and Europeans then compartmentalization might give way and a concept of Western Civilization might emerge.

Objectives: 1. To analyze the community of American and European revolutionary and radical political thinkers: to study the commonality of their ideas and the degree to which they communicated with one another and visited one another--1840-1880. and thus to

2. breakdown the artificial barriers that students have which separates American and European History, and further to

3. enable a student of modern Western Civilization to define, with some precision, just what Western Civilization is.

Research Plan: Among the hundreds of 19th century revolutionaries and radical thinkers, I have selected a few: Felix Pyat, Ledru-Rollin, Cluseret, Delescluze, Proudhon (Fr.); Mazzini, Garibaldi, Orisini (Ital.); Karl Follen, Schurz, and Marx (Ger.); Godwin Eng.); Sumner and Garrison (Amer.); Pulsky and Kossuth (Hungarian); Bakunin and Herzen (Russ.). Some of these are often thought of as internationalists, but most are not; most are identified with national movements. Yet all have common interests, and share common ideas; all are truly cosmopolitan in their movements and helped contribute to similar movements throughout Western Civilization. To speak of an actual conspiracy is wrong; to talk of mutural influence is fuzzy. But they had contact, they exchanged ideas, and they supported one another. It was a group without organization responding in a particular way to problems common to Western Civilization, even though the problems may have unique manifestations in particular nations (slavery in the U.S., the industrial worker in England, the serf in Russia and Hungary) I want to study this so that I can present the material in various ways (a collection of readings, etc.) inside and outside the classroom.

Results: A final report has not been received as research is continuing.

Researcher: Henry O. Whiteside, Assistant Professor of History

Research Title: Curriculum Development in Historical Method: Introductory Historiography

Research Duration: May 15, 1971 to August 31, 1971

Budget: $743.25

Contribution to Education: History as taught at both the secondary and undergraduate levels suffers from its apparent "given-ness" its seeming lack of any philosophical assumptions or methodological basis. The student is presented with "the story," or several versions, ans asked to remember it, or, more hopefully, to understand it. As long as consideration of what history is and how it is created is reserved to advanced graduate study there seems little alternative to this essentially passive and, for all too many students, stultifying approach. This investigation seeks to develop a suitable curriculum for the introduction of sophomore level students to the above mentioned concerns.

Objectives: The objective of this project is to advance the development of a series of eighteen exercises in historiography which form a progression from the question, "What is History?" to inquiry into historical causation. This program of exercises has been tested during the 1970-1971 academic year at two Denver institutions of higher learning. It will be the objective of this project or revise the program in the light of results from these two trials, with a view to ultimate submission of the program to a commercial publisher.

Research Plan: The program consists of a series of eighteen exercises integrated to constitute a progression from fundamental and simple problems in historical method to more complex concerns of causality and philosophy of history. Each exercise consists of a selection of historical source materials, usually but not always documents or other written sources, introduced by editorial material providing background and posing the problem to be explored. The exercises are grouped into four sections, each with its own general introduction. The program is intended for use with one of the extended introductory essays in historiography or with any of the manuals in method under the supervision of an experienced instructor.

Results: A final report has not been received as research is continuing.

Research Projects Done At

University of Denver
(Colorado Seminary)

Researcher: Dr. James L. Aten

Research Title: Testing Auditory Perception of Minimally Varied Phonemic Sequences (Developmental Norms)

Research Duration: July 5, 1968 to September 1, 1969

Budget: $315

Contribution to Education: No norms currently exist to indicate the temporal rate at which children process phonological information presented serially nor is there information on the number of minimally varied words that a child can sequentially retain and reorder. These basic abilities increase with age and are related to language skills, articulation ability (in some) and generally to comprehension of aurally presented academic information. Until norms are established the degree of auditory perceptual handicap cannot be ascertained.

Objectives: To define basic skill in auditory perception of phonological variance at age levels 5-12 years and identify children lacking in this skill so that remediation and compensation may be initiated.

Results: The results of testing provided an index of growth in auditory perception of sequential order (as noted by increasing memory spans and accuracy of sequential ordering ability) by six month age levels within the group tested. A group of 8 pathological children, who were slightly older and who demonstrated language disabilities, were also tested. Their performances were significantly poor and gave indication when compared with the normative group of being one to three years behind on several of the sub-tests despite their normal or above average general intellectual ability.

A proposed study was developed and submitted to the Office of Education, but was not funded, with the suggestion that the project be revised to include a validating group (rather than just collecting normative data) and be re-submitted. The proposal is being revised.

In addition to the grant proposal cited above, the tests in their experimental form have been used by Dr. James Curtiss to explore differential auditory perceptual abilities in left and right brain damaged adult subjects.

Dissemination: Findings were reported to the 1969 Council for Exceptional Children Convention and an abstract of that report was printed in the Proceedings of the 47th Annual International Convention entitled, "Selected Convention Papers."

Researcher: Russell Erickson, Graduate Assistant

Research Title: Development of a System for Reviewing Progress and Achievement of Graduate Students at the University of Denver

Research Duration: Summer and Fall 1971

Budget: $350

Contributions to Education: The compiling and analysis of the data will have long-range impact upon the operation of the Graduate School of Arts and Sciences. The analysis will also provide better understanding of the nature of graduate study at the University of Denver and of the progress of graduate students within the various programs.

Objectives: To put the information in a form in which study is possible and permit continuing audit and analysis. To obtain information to enable the Graduate School to review and update policies.

Results: The methodology of the study consisted of accumulating the necessary data from the files of the Graduate Dean, to compare these data with the records held in the University Registrar's Office, then to verify the information with the various department. The data was then coded and prepared for computer analysis. A list of tables which outline the basic information obtained for the period 1966-1971 includes:

1. Degrees Conferred by Year 66-70; 2. Doctoral Degrees Conferred by Field: Span of Years Awarded and Average Per Year; 3. Masters Degrees Conferred by Field: Span of Years Awarded and Average Per Year; 4 + 5. Doctoral Degrees and Masters Degrees Conferred by Field, 1966-1970; 6 + 7. Sex of Ph.D. and Ed.D. Recipients by Year from 1966-1970; 8. Sex of DU Masters Recipients by Year from 1966-1970; 9. Sex of DU Masters Recipients by Field from 1966-1970; 10 + 11. Sex of DU Masters and Doctoral Recipients by Field by Year, 1966-1970; 12 + 13. Age of DU Masters Recipients at Time of Degree by Year, 1966-1970 (Male & Female); 14 + 15. Age of DU Doctorate Recipients at Time of Degree by Year, 1966-1970 (Male & Female); 16. Mean Age of DU Degree Recipients by Field from 1966-1970; 17. Median Age of DU Degree Recipients by Field from 1966-1970; 18 + 19. Place of Birth of Masters and Doctors Degrees Recipients by State and Country, 1966-1970; 20. Citizenship of DU Degree Recipients, 1966-1970; 21. Location of First Baccalaureate of DU Masters Recipients by School, State, Country, 1966-1970; 22. Location of First Baccalaureate of DU Doctoral Recipients by School, State, Country, 1966-1970; 23. Location of First Masters Degree of DU Doctorate Recipients by School, State, and Country, 1966-1970; 24. Location and Type of First Position of Doctorate Recipients; 25. Years of Elapsed Time between First Enrollment in a Graduate Program at DU to Receipt of the Doctorate; 26. Mean of Combined Verbal and Quantitative GRE Scores of DU Masters Recipients, 1966-70; and 27. Average Years of Elapsed Time from Completion of First Baccalaureate to the Receipt of the Doctorate by Field, 1966-1970.

Researcher: Larry Fenson, Ph. D., Assistant Professor, Dept. of Psychology

Research Title: Effects of Response Contingent Visual Stimulation on Frequency and Duration of Free-Operant Lever-Pressing by Six-Month-Old Infants

Research Duration: April 1969 to July 1970

Budget: $570

Contribution to Education: The findings suggest that the method is of use for studying basic learning processes in the human infant. The response measures show potential utility for assessment of the effects of variations in the early environment on developmental processes in the first six months of life.

Objectives: Development of a method for the study of visual reinforcement in young human infants and a comparison of stimuli which serve as visual rewards with these which elicit and maintain attention.

Results: Three response measures were obtained for each subject in one-minute blocs; response frequency, total response duration, and average response duration (frequency÷ total response duration in each one-minute period). There was a significant effect of stimulus order. Response frequency was higher for each stimulus when it appeared first on a given day than when it appeared second. Response frequency declined over time. There was a greater decline over time in frequency of response when the "X" was the contingent stimulus than when the face was the contingent stimulus.

Total duration proved to be the most sensitive of the three response measures. The total response duration was greater when the face was the contingent stimulus than when "X" pattern was contingent.

The present study was designed primarily to assess the appropriateness of a free-operant technique for studying some parameters of visual reward with human infants and the sensitivity of several response measures using such a technique. It was anticipated that a duration measure would prove more sensitive than response frequency since the contingent stimulus remained available as long as the infant maintained pressure on the bar. This expectation was confirmed in that total duration per minute was significantly longer when the face was the contingent stimulus, whereas response frequency was virtually equal under the two stimulus conditions. Although response frequency *per se* did not vary as a function of Stimulus Condition, the rate of decline in frequency over time did prove to be a useful measure and merits close attention in further work.

Dissemination: Being prepared for publication.

Researcher: Dr. D. Bruce Gardner, Professor of Psychology

Research Title: Visual and Auditory Perception of Time and Rhythm in Children and Adults

Research Duration: October 1967 to June 1969

Budget: $620

Contribution to Education: Knowledge concerning the way in which children come to integrate visual and auditory perceptual processes in the structuring of intelligence.

Objectives: Children whose cross-modal matching of visual with auditory patterns is markedly inferior to their within-modal matching are predicted to have greater difficulty in normal learning experiences such as reading instruction.

Results: The project investigated mechanisms of time and rhythm perception in three age groups: 2nd graders, 6th graders, and college sophomores. Subjects were asked to match pairs of rhythm patterns presented visually, or aurally, or mixed visual-auditory, and the relative ability to make accurate perceptual judgments of the rhtyhm patterns (both for same sense modality and for mixed modalities) was determined for the three age levels. The ability to integrate rhythm information across sensory modalities was shown to "lag," developmentally, far behind the ability to process the same materials within a single modality. Implications for applied areas such as reading instruction were noted and reported to the Society for Research in Child Development. The study laid the groundwork for a series of further investigations, now in progress, on auditory and visual perception in children, with emphasis on extraneous factors in the perceptual field which affected judgments of physical events.

Dissemination: A paper growing out of this research was presented at a meeting of the Society for Research in Child Development, Santa Monica, California in March 1969.

Researcher: Dr. Paul D. Knott

Research Title: A Study of the Antecedents of Human Aggressive Behavior

Research Duration: March 1969 to December 1970

Budget: $695

Contribution to Education: Further refinement of knowledge concerning human aggressive behavior.

Objectives: Experimentation in order to (1) delineate the interrelationship among these basic aspects of aggressiveness - interpersonal dominance, actual physical aggression, and verbal hostility, and (2) provide further groundwork for an eventual attempt to develop a theory of human aggressive behavior.

Results: This project was partially funded through the CORD grant. The investigator reports that after two years of pilot work he has developed laboratory measures of these basic aspects of aggressive behavior: interpersonal dominance, actual physical aggression, and verbal hostility. In addition, we have also been able to refine our measure of daily testosterone production, which is a concomitant of aggressiveness. We are now moving out of the pilot work stage and into the stage of controlled experimentation in order to (1) delineate the interrelationships among these aspects of aggressiveness and (2) provide further groundwork for an eventual attempt to develop a theory of human aggressive behavior which should stimulate still more research.

Our studies will be conducted at the Canon City State Prison and the State Reform School in Golden. Special care is being used to meet all of the ethnical standards for the conductance of scientific research with human beings as set down by the American Psychological Association.

Dissemination: Publications are planned for the *Journal of Abnormal Behavior* and the *Journal of Personality and Social Psychology*.

Researcher: Carol J. Metsker

Research Title: Teaching the Basic Elements of Political Cartoons to Kindergarten Children

Research Duration: January 1, 1970 to July 31, 1970

Budget: $700

Contribution to Education: To provide some statistically sophisticated research data relating to the use of the newspaper by kindergarten children.

Objectives: To test the hypothesis that primary age youngsters are capable of much greater intellectual stimulation than they generally receive in public schools.

Research Plan: Research findings in the use of the newspaper by children are nonexistent.

It is desired to obtain some statistically sophisticated research data in the area of teaching the basic elements of political cartoons to kindergarten children. This would necessitate a "two-pronged" research study:

Phase one: A Planning Stage

Phase two: The Statistical Study

Out of the planning phase would come the following:

Development of the Behavioral Objectives

Development of the Instruments

Definition of Treatments

Refinement of Treatments

The Pilot Study

Evaluation Techniques

Results: A final report has not been submitted, as research is continuing.

Researcher: Elizabeth Midlarsky, Ph.D., Assistant
Professor, Department of Psychology

Research Title: Experiments in the Psychology of Altruism

Research Duration: June 1971 in progress

Budget: $900

Contributions to Education: This particular experiment was viewed as educational research, because it attempts to determine whether self perception has significant bearing on behavior. Previous research has suggested that perceptions of oneself do have a bearing upon how the individual responds. Do perceptions of self have any bearing on the way in which the individual volunteers to help others? If so, this knowledge can be of assistance to the teacher in stimulating individuals who help others in the learning situation.

Objectives: While several general studies have investigated the affect upon generosity of a model's behavior, the present will extend previous work of this experimenter and of others by assessing the impact of exposure to a model who expresses happiness contingent upon his own selfishness or generosity. A second purpose is the exploration of the affects of rationalized exhortations. Results of previous experiments, which have employed simple restatements of a social responsibility norm as their pro social exhortations, have consistently demonstrated that while a model's exhortations affect the child's judgment of him, they do not affect his behavior. This study will assess the affect on behavior of exhortations justified on the basis of their impact on the recipients.

Research Plan: The first experiment in the series will employ a 2x2x2 factorial design to explore the effects of a model's exhortations, behaviors, and expressions of positive affect upon imitative altruism. The subjects will be 64 boys and 64 girls enrolled in the 4th and 5th grades of a Denver area school. It is predicted that both exhortations and motor acts by model will affect the subjects' altruistic behaviors, and that model's expression of contingent positive affect will increase the subjects' imitation of that behavior.

In order to conclude that an experimental treatment has resulted in the internalization of behavioral dispositions, one must provide evidence that the treatment effects are lasting, and that they will generalize to contexts dissimilar to the original testing situation. Therefore, employment will be made of two donation tasks, separated by time by one week and one-half weeks, to order to test both duration and generality of the treatment effects.

Results: A final report has not been received as research is continuing.

Researcher: Allan O. Pfnister

Research Title: Study of the Impact of Foreign Study on Undergraduate Students

Research Duration: March 1971 to September 1971.

Budget: $1,500

Contribution to Education: The findings in the study of students in this program should be applicable to the evaluation of other overseas study programs.

Objectives: To test the change in students' opinions and attitudes as a result of having participated in an overseas study program.

Research Plan: Based on Chickering's hypothesis relating to six major sources of influence on the student development investigate if there are observable changes in students' opinions and attitudes. As a result of having participated in the Study Service Term of Goshem College, Goshem Indiana--

(1) Description of the Program based on--
   a) To what extent is the purpose of the program clearly stated and understood by those involved?
   b) What kind of group interaction takes place?
   c) To what extent is the curriculum teaching and evaluation flexible and adopted to the potentialities of the situation?
   d) What is the nature of student-faculty interaction during the Study Service Term?
   e) To what extent does the student culture affect perceptions of numbers of the group?

(2) Administer a 100-item forced choice schedule (c. Robert Pace) shortly before students leave for the term, upon their return to campus and one year later. For comparison, the test will be given to a control group remaining on campus.

(3) Obtain information from students regarding their own self-assessment of the experience and unit director's judgments on the personal development of students under direction.

Results: A final report has not been received as research is continuing.

Researcher: Bernard Spilka, Professor of Psychology

Research Title: Educational Achievement and Alienation Among Sioux High School Students: A Follow-Up Study

Research Duration: January 1, 1970 to April 30, 1970

Budget: $850

Contribution to Education: Longitudinal work of this sort has not been carried on with Indians, and it is apparent that in this research there is an opportunity to make a significant contribution to educational and psychological literature.

Objectives: To determine psychological factors related to declining patterns of educational achievement and high drop-out rates among Sioux Indian youth.

Results: In 1965-66, the writer, under an NIMH grant, carried out an extensive study on and near the Pine Ridge reservation in South Dakota in order to determine psychological factors relating to declining patterns of education achievement and high dropout rates among Sioux Indian youth. This investigation involved some 1600 children, about 800 whites and 800 Indians. Some 32 measures were specifically constructed to assess the domains of Alienation, Achievement Motivation, Attitudes toward School, and Child-Rearing practices. In addition, extensive use was made of school records on intelligence and achievement. Experimental methods of assessing teacher-pupil relationships were also introduced here. Work with the students was supplemented by interviews of 210 selected mothers. This would appear to be the largest and most comprehensive study of the Indian educational situation undertaken to date, and analysis of the findings is still being carried out.

In the earlier work, some 360 Indian children were assessed in the 7th and 8th grades. Those who are still in school may be expected to be in the 10th, 11th, and 12th grades. In this study an effort will be made to determine the intervening period to those pupils and thus on the basis of the earlier data determine the accuracy of prediction of achievement at school continuation. The study will involve retesting of the children available and examination of and gather data from school records in about 16 schools in and near the reservation.

This study attempted to determine non-intellectual correlates of educational achievement reductions which occurred with increasing grade level for 105 Oglala Sioux high school students. A growing alienation was theorized as central in this developmental process. Achievement indices were correlated with measures of alienation and it components, powerlessness, normalness and social isolation. Needs for social approval and prejudice were also assessed. Uncorrected linear correlations were supplemented by part and partial r's ro remove influence of intelligence. Strong support was gained for the view that alienation plays an increasing role in the performance of these peoples.

APPENDIX C

LISTING OF DIRECTORS AND ADVISORY COMMITTEE MEMBERS

APPENDIX C

COLORADO CORD
DIRECTORS AND ADVISORY COMMITTEE MEMBERS

Directors:	**Term of Office**
Francis J. Kerins, Ph.D.	January 8, 1968 to September 30, 1968
Edward Murray, Ph.D.	October 1, 1968 to December 31, 1968
Sonya Read, Ph.D.	January 1, 1969 to June 30, 1970
Marie Milliken	July 1, 1970 to August 31, 1971
Assistant Director:	
Marie Milliken	January 1, 1970 to June 30, 1970
Advisory Committee Members:	
Colorado College:	
George Drake, Ph.D.	January 8, 1968 to September 30, 1968
Glenn Brooks, Ph.D.	October 1, 1968 to June 30, 1969
Jack L. Carter, Ph.D.	July 1, 1969 to December 31, 1969
Harold Polk	January 1, 1970 to August 31, 1971
Loretto Heights College:	
Director served in this capacity	January 1, 1968 to July 31, 1968
Edward Murray, Ph.D.	August 1, 1968 to September 30, 1968
Sonya Read, Ph.D.	October 1, 1968 to December 31, 1968
Bridget Hayes, S.L., Ph.D.	January 1, 1969 to August 31, 1971
Regis College:	
Donald L. Salmon	January 8, 1968 to August 31, 1971
Southern Colorado State College:	
Glen Allen	January 8, 1968 to August 31, 1971
Temple Buell College:	
David Ray Norsworthy, Ph.D.	January 8, 1968 to August 30, 1968
Wallace Hunter	October 1, 1968 to June 30, 1970
John Love, Ph.D.	July 1, 1970 to August 31, 1971
University of Denver (Colorado Seminary):	
Ralph Forsythe, Ph.D.	January 8, 1968 to September 30, 1968
Francis J. Kerins, Ph.D.	October 1, 1968 to June 30, 1969
Allan O. Pfnister, Ph.D.	July 1, 1969 to August 31, 1971

APPENDIX D

NEWSLETTER
NUMBER 6

CORD NEWSLETTER No. 6, August, 1971

FINAL REPORT OF CORD PROJECTS

The Colorado CORD project ends on August 31, 1971 and the final report of the project has been submitted. A final report of projects funded by CORD must be submitted when available to be sent as a supplementary report to the Office of Education.

The project met, in large part, the objectives set forth by its founders, mediated by the changing conditions during its life. Faculty members and administrators of member colleges are, we believe, more aware of the benefits of educational research and the necessity of such research in testing methods and in planning innovative projects. The experimental method in education is vital to its future usefulness in the rapidly changing world.

Fifty-five individual faculty research projects were funded. It is evident that the research done by faculty members varied in sophistication and usefulness. Involvement is seen as a most important step. Seven conferences were held for faculty and administration of member colleges. Those who attended conferences and did not conduct research would hopefully have a different perspective on the teaching-learning process. They would have a more critical attitude toward teaching methods, curricular development and other facets of education, and would perhaps test out their planned changes in more informal ways.

Local Research Committee will continue with budgets limited by the financial ability of the local institutions. Throughout the CORD projects the administration of each member institution has offered firm commitment to continue to foster educational research in their respective institutions.

The interinstitutional cooperation which has been so evident during the project will not survive with formal structure beyond the end of the CORD project, although some informal relationships are expected to continue.

One of the major problems of the Consortium was the almost constant turnover of personnel. Although this turnover did introduce a larger number of persons into the Advisory Committee and Directorship, it tended to prevent a cohesiveness which would have made the Consortium's continuation certain.

In summation, the Consortium did have an impact on the member institutions and their faculties and administrations which can only be measured by the activities beyond its demise.

We would like to thank all who gave life and meaning to the Consortium and those who will continue to carry out it's objectives!

CAPSULE REPORTS OF CORD PROJECTS

Some results submitted on projects printed in earlier Newsletters:

Significance of Collegiate Factors Such as the Major and Grade Point Average as Related to Post Graduation Occupation

Dr. Helen Brush
Behavioral Science
Temple Buell College

Results: The total number of students graduated in these years was 728. Marital status was most closely correlated to length of time since graduation than any other factor. Twenty-four students reported Master's degrees and one a Ph.D. Several students reported they were finishing degrees in 1970. Majors ranked by total SAT scores were Biology, Psychology, Medical Technology, Philosophy, English, Theater, Sociology, Foreign Languages, Divisional majors, Music, Elementary Education, Family Studies, Art, History, American Studies, and Asian Studies. Psychology appeared to attract students with high scores in verbal and math. Biology majors had sufficiently high math scores to rank first in combined scores although they were sixth in verbal scores. Only one student was in each of the American/Asian study categories.

There is no inter-rank consistency between mean cummulative grade point averages for the years 1967-69 and mean SAT verbal or math or the combination compared by majors.

A Comparative Analysis of Perceptions of Students Right at a Four-Year Liberal Arts College

Joan L. Dwyer
Department of Physical Education
Temple Buell College

Results: The sample groups used in this investigation consisted of 165 undergraduate women students identified according to class year, cummulative grade point average, and major division; 36 faculty members identified according to sex, age, and divisional status; 11 student personnel workers identified according to age; 23 administrators identified according to age; and 23 trustees also identified according to age.

The findings of the study appeared to justify the following conclusions with regard to perceptions of student rights at Temple Buell College:

1. Students' perceptions of what student rights should be at this particular college differ significantly from those of administrators and trustees, and this same difference is also found between faculty members and trustees. Students and faculty tend to be more alike in what they consider to be desirable student rights, and their more permissive viewpoint appears to be opposed to one more restrictive expressed by both administrators and trustees. Student personnel workers appear to be somewhere in the middle of this continuum in that only one instance of significant difference was found when this sample group was compared with each of the others.

2. Variables such as students' class year, cumulative grade point average, and major division do not relate to students' perceptions of student rights at Temple Buell College.

3. Neither sex nor divisional status of faculty members has any effect on faculty perceptions of student rights.

Visual and Auditory Perception of Time and Rhythm in Children and Adults

Dr. D. Bruce Gardner
Professor of Psychology
University of Denver

Results: The project investigated mechanisms of time and rhythm perception in three age groups: 2nd graders, 6th graders, and college sophomores. Subjects were asked to match pairs of rhythm patterns presented visually, or aurally, or mixed visual-auditory, and the relative ability to make accurate perceptual judgments of the rhythm patterns (both for same sense modality and for mixed modalities) was determined for the three age levels. The ability to integrate rhythm information across sensory modalities was shown to "lag," developmentally, far behind the ability to process the same materials within a single modality. Implications for applied areas such as reading instruction were noted and reported to the Society for Research in Child Development. The study laid the groundwork for a series of further investigations, now in progress, on auditory and visual perception in children, with emphasis on extraneous factors in the perceptual field which affected judgments of physical events.

A Study of the Antecedents of Human Aggressive Behavior

Dr. Paul D. Knott
University of Denver

Results: This project was partially funded through the CORD grant. The investigator reports that after two years of pilot work he has developed laboratory measures of these basic aspects of aggressive behavior: inter-personal dominance, actual physical aggression, and verbal hostility. In addition, we have also been able to refine our measure of daily testo-sterone production, which is a concomitant of aggressiveness. We are now moving out of the pilot work stage and into the stage of controlled experimentation in order for 1) delineate the interrelationships among these aspects of aggressiveness and 2) provide further groundwork for an eventual attempt to develop a theory of human aggressive behavior which should stimulate still more research.

Our studies will be conducted at the Canon City State Prison and the State Reform School in Golden. Special care is being used to meet all of the ethnical standards for the cond[illegible]ance of scientific research with human beings as set down by the A[illegible]rican Psychological Association.

The Unassimilated Greeks of Denver

Dr. James Patterson
Temple Buell College

Results: This study looks at the existence of a group of Greek immigrants in Denver who have remained firmly unassimilated over a long period of years despite the movement toward assimilation on the part of many of their compatriots and the increasing Americanization of Greeks in Denver. The Greek community in Denver began around the turn of the century with immigrants who worked in the mines and on the railroads and who started many small businesses. Gradually, as their numbers increased and as they prospered, they moved in a southeasterly direction in the city, so that the majority of the 4,000 Greek-Americans now live in SE Denver. The original Greek Town, a complex of restaurants, coffee houses and related establishments, served the newest immigrant arrivals and the small number who remained unassimilated. The number of establishments began to decline in the 1930's and at the time of the study there were no restaurants serving Greek food and only one coffee house left (the entire area is now gone due to Urban Renewal). The kafeneion served the remaining unassimilated old men and also the few younger new arrivals. The old men had been largely unsuccessful financially, maintained close emotional orientation toward Greece, and were ambivalent toward U. S. culture. The study investigates the history of the Greeks in the U. S., Colorado and Denver, and focuses on the habitues of the coffee house and the inhabitants of Greek Town and their peripheral relationship to the larger Greek community and church. It looks at their values and behavior, the life histories of selected kafeneion regulars, attitudes of the larger Greek community toward the area and its residents, conflict and factionalism within the group, glowback to the homeland, applicable acculturation and assimilation theory, and the future of the unassimilated Greeks of Denver and of Greek Towns in America.

Some new projects funded:

LORETTO HEIGHTS COLLEGE

A Proposal for Preliminary Investigations for Curriculum Development for Environmental Studies and Sciences

Jeanne d'Arc Schleicher, S.L.
Professor of Biology

Contributions to Education: Development of a curriculum for Environmental Studies and Sciences at Loretto Heights College. As a response to need for colleges and universities to respond to the environmental crises in their educational programs.

Objectives: 1. To identify general environmental problems, areas, or tasks to which Loretto Heights College could contribute by preparing students who are motivated and educated to work toward solving interrelated environmental problems. 2. To assess the specific resources within the local community with respect to problem-solving study and off campus experience for students in the environmental program. 3. To measure the support and probable commitment to such a program by students, faculty, administrators, and trustees. 4. To determine what financial support is available from the funding agencies for curriculum development, implementation and validation. 5. To select a coordinator for curriculum development.

Increase in Research and Course Offerings in the Study of Time as a Function of the Availability of a Comprehensive Reference Work

Joseph Sprug, Professor and Librarian
Irving Zelkind, Ph.D., Professor of Psychology

Contributions to Education: A systematically constructed comprehensive reference work providing easy access to the research in the field of Time Perception would stimulate more research and would greatly aid in introducing courses or sections thereof dealing with Time Perception.

Research Plan: Phase 1 of this proposed research project would be concerned with the collecting and abstracting of 1,000 published studies in the field of Time Perception. The studies will be organized according to the dependent and independent variables utilized. Indexes and cross references will be provided so that each study is accessible through several ways, e.g., author, journal, chronology, and frequency of citation.

Phase 2 will determine by statistical analysis the effect of this work on the production of research in Time Perception and the introduction of courses in this subject. The number of articles published and the number of courses offered subsequent to the availability of the reference work will be compared to the pre-publication figures. The statistical procedures to be used will include trend analysis and regression analysis.

REGIS COLLEGE

Evaluation of Use of Summer Program by Non-Admitted Marginal High School Students

Daniel Lynch

Contributions to Education: Attempts will be made to recommend a pattern for a summer program study for marginal students.

Objectives: 1. To evaluate the uses by marginal students of the summer program to prove academic capability. 2. To examine ways in which this preview of college affected their course progress or lack of same. 3. To recommend how summer program study for marginal students can be formalized as an institute in which these will be learning impacts.

Perceived Goals of Administrators, Faculty and Students

Donald L. Salmon
Department of Government

Contributions to Education: If differences in goals by the different campus groups are discovered, some action might be taken to make differing goals known so causes of friction might be better understood.

Objectives: To ascertain the degree of agreement among administrators, faculty and students on matters relating to goals, and then to see if the perceived goals and patterns of governance are congruent with goals articulated in department and college publications, and the actual patterns of governance as near as the latter can be discerned from objective evidence.

An Investigation of the Inter-relationships of Religion/Theology and Politics

James Wright
Sr. Laetia Slusser

Contributions to Education: Insights gained about dealing with set or fully developed attitudes and their change or modification can be used in the educational process of college students, part of whom have highly developed attitudes relating to problems that reflect these interrelationships and part of whom have only partially developed attitudes.

Objectives: To measure interrelationships attitudinally of religion/theology and politics as they are believed to exist in or on many contemporary problems, e.g., abortion, support for migrant programs, government support for abortions, and other areas of controversy.

SOUTHERN COLORADO STATE COLLEGE

Application of Signal Detection Theory to the Study of Recognition Memory

Rick M. Gardner, Ph.D.
Assistant Professor of Psychology

Contributions to Education: To attempt to better understand the process of learning and retention of verbal material has, I believe, obvious educational relevance. The present research is also attempting to investigate how different rates of forgetting occur with differing levels of meaningfulness.

Objectives: An attempt is being made to apply the principles of signal detection theory to essentially a learning task. The theory offers certain methodological advantages over other procedures commonly used in research on memory and human learning.

Recording Projects: Adler and Finney Piano Trios

Kent Holliday
Associate Professor of Music

Contributions to Education: Recording and disseminating new chamber music for the use of teachers and students. The discs will be made available free of charge to public libraries, college and university libraries, and music conservatories in the United States.

Objectives: To record the chamber works of two highly respected but little known American composers, Ross Lee Finney and Samuel Adler.

Glossary for Economic Literacy

John Lee Pisciotta, Ph.D.
Assistant Professor of Economics

Contributions to Education: The Glossary for Economic Literacy will supplement and to a large extent replace the reliance on textbooks and lectures for definitions of concepts and descriptions of economic institutions, Other advantages are: 1) It will add to the effectiveness of providing basic vocabulary since text and lectures often fail to provide succinct explicit definitions of terms; 2) Use of the glossary will free class time for more extensive treatment of economic subjects, applications of knowledge, class discussion, etc. 3) The glossary will be available to the students for ready reference.

Objectives: To develop a Glossary for Economic Literacy to be used in introductory economics courses the importance of such a teaching aid relates to the general need for a glossary of economic terms and to its role in improving economic literacy.

TEMPLE BUELL COLLEGE

Evaluation of Individual Rate Program for Undergraduate College Courses

Roy E. Connally
Assistant Professor of Psychology

Contributions to Education: During the fall and spring semesters of 1970-71, Temple Buell College offered a broad selection of courses in an experimental format. Under this format, students were presented with a clearly stated set of course objectives which they could complete at their individual rates and thus receive credit for the course. There was no penalty for not completing the course in a prescribed time. It is hypothesized that this program provides a more favorable milieu for academic achievement thnn the traditional format of regularly scheduled lectures, quizzes, letter grades, etc. Research and dissemination of whether or not this hypothesis is empirically supported would be of great value and interest to the academic community.

Objectives: The objectives of the proposed research to analyze and publish an empirical evaluation, within the limits of available data, of the experimental course format offered at Temple Buell College.

Taiwan and the Future of Sino-American Relations

Daniel Lovelace
Assistant Professor of Political Science

Contributions to Education: Materials and information regarding the politics of modern China are difficult to obtain or non-existent in the United States. As a basis for classes taught which deal with Modern China, American Foreign Policy, and Sino-American relations with China this material would be invaluable. I plan to publish my interpretations of the material.

Objectives: To gather information and materials on the following questions: 1. How important is the Taiwan Issue as an obstacle to better U. S.-China relations? 2. What are the current alternatives available for the solution of the "Taiwan Question"? 3. What additional alternatives might be explored by the various parties concerned, given a continued trend of rapprochement in Sino-American relations?

Reading Classical Greek Made Easier

Michael J. Preston
Professor of English

Contributions to Education: Adapting and applying the already-developed methods of acquiring language skills to classical (Homeric) Greek.

Objectives: 1. Rapidly to develop recognition-skills. 2. To practice those skills with selections from the *Odyssey* and *Iliad*. 3. To make a basic transition to Attic Greek. 4. To practice Attic reading skills on Euripides' *Cyclopes*. The net result is an Attic reading ability roughly comparable with that developed in a traditional attic-centered course, and a Homeric reading ability as a bonus.

The Role of the Pluperfect in Contemporary German

Nikolai A. Safonov
Professor of Russian & German

Contributions to Education: The result of this research would constitute an important contribution to German language teaching in the classroom since it might lead to a simplification in the use of the past tenses, one of the more difficult subjects in the study of German grammar.

Objectives: The purpose of this study is to ascertain to what extent the pluperfect has penetrated the Standard German language, replacing the simple past or the present perfect tense.

The Western World's Revolutionary Community: A Preliminary Study

Harold A. Schofield
Associate Professor of History

Contributions to Education: We encourage a strict compartmentalization of knowledge by the way we structure disciplines and by the exclusiveness with which we pursue subjects that need not be so exclusive. Students preserve the compartmentalization in their thinking. This project to study the relative cosmopolitanism of the 19th century revolutionary and radical political figures will help to break down the artificial barrier which separates American from European history. If the student could view revolutionary thought as commonly held by Americans and Europeans then compartmentalization might give way and a concept of Western Civilization might emerge.

Objectives: 1. To analyze the community of American and European revolutionary and radical political thinkers: to study the commonality of their ideas and the degree to which they communicate with one another and visited one another -- 1840-1880, and thus to 2. break down the artificial barriers that students have which separates American and European History, and further to 3. enable a student of modern Western Civilization to define, with some precision, just what Western Civilization is.

Curriculum Development in Historical Method: Introductory Historiography

Henry O. Whiteside
Assistant Professory of History

Contributions to Education: History as taught, at both the secondary and undergraduate levels, suffers from its apparent "given-ness", its seeming lack of any philosophical assumptions or methodological basis. The student is presented with "the story", or several versions, and asked to remember it, or more hopefully, to understand it. As long as consideration of what history is and how it is reserved to advanced graduate study there seems little alternative to this essentially passive and, for all too many students, stultifying approach. This investigation seeks to develop a suitable curriculum for the introduction of sophomore level students to the above mentioned concerns.

Objectives: The objective of this project is to advance the development of a series of eighteen exercises in historiography which form a progression from the question, "What is History?" to inquiry into historical causation. This program of exercises has been tested during the 1970-1971 academic year at two Denver institutions of higher learning. It will be the objective of this project to revise the program in the light of results from these two trials, with a view to ultimate submission of the program to a commercial publisher.

UNIVERSITY OF DENVER

Testing Auditory Perception of Minimally Varied Phonemic Sequences (Developmental Norms)

Dr. James L. Aten

Contributions to Education: No norms currently exist to indicate the temporal rate at which children process phonological information presented serially nor is there information on the number of minimally varied words that a child can sequentially retain and reorder. These basic abilities increase with age and are related to language skills, articulation ability (in some) and generally to comprehension of aurally presented academic information. Until norms are established the degree of auditory perceptual handicap cannot be ascertained.

Objectives: To define basic skill in auditory perception of phonological variance at age levels 5-12 years and identify children lacking in this skill so that remediation and compensation may be initiated.

Results: The results of testing provided an index of growth in auditory perception of sequential order (as noted by increasing memory spans and accuracy of sequential ordering ability) by six month age levels within the group tested. A group of 8 pathological children, who were slightly older and who demonstrated language disabilities, were also tested. Their performances were significantly poor and gave indication when compared with the normative group of being one to three years behind on several of the sub-tests despite their normal or above average general intellectual ability.

A proposed study was developed and submitted to the Office of Education, but was not funded, with the suggestion that the project be revised to include a validation group (rather than just collecting normative data) and be re-submitted. The proposal is being revised.

In addition to the grant proposal cited above, the tests in their experimental form have been used by Dr. James Curtiss to explore differential auditory perceptual abilities in left and right brain damaged adult subjects.

Effects of Response Contingent Visual Stimulation on Frequency and Duration of Free-Operant Lever-Pressing by Six-Month-Old Infants

Larry Fenson, Ph.D.
Assistant Professor
Department of Psychology

Contributions to Education: The findings suggest that the method is of use for studying basic learning processes in the human infant. The response measures show potential utility for assessment of the effects of variations in the early environment on developmental processes in the first six months of life.

Objectives: Development of a method for the study of visual reinforcement in young human infants and a comparison of stimuli which serve as visual rewards with these which elicit and maintain attention.

Results: Three response measures were obtained for each subject in one-minute blocs; response frequency, total response duration, and average response duration (frequency; total response duration in each one-minute period). There was a significant effect of stimulus order. Response frequency was higher for each stimulus when it appeared first on a given day than when it appeared second. Response frequency declined over time. There was a greater decline over time in frequency of response when the "X" was the contingent stimulus than when the face was the contingent stimulus.

Total duration proved to be the most sensitive of the three response measures. The total response duration was greater when the face was the contingent stimulus than when "X" pattern was contingent.

The present study was designed primarily to assess the appropriateness of a free-operant technique for studying some parameters of visual reward with human infants and the sensitivity of several response measures using such a technique. It was anticipated that a duration measure would prove more sensitive than response frequency since the contingent stimulus remained available as long as the infant maintained pressure on the bar. This expectation was confirmed in that total duration per minute was significantly longer when the face was the contingent stimulus, whereas response frequency was virtually equal under the two stimulus conditions. Although response frequency per se did not vary as a function of Stimulus Condition, the rate of decline in frequency over time did prove to be a useful measure and merits close attention in further work.

Experiments in the Psychology of Altruism

Elizabeth Midlarsky, Ph.D.
Assistant Professor
Department of Psychology

Contributions to Education: This particular experiment was viewed as educational research, because it attempts to determine whether self perception has significant bearing on behavior. Previous research has suggested that perceptions of oneself do have a bearing upon how the individual responds. Do perceptions of self have any bearing on the way in which the individual volunteers to help others? If so, this knowledge can be of assistance to the teacher in stimulating individuals who help others in the learning situation.

Objectives: While several general studies have investigated the affect upon generosity of a model's behavior, the present will extend previous work of this experimenter and of others by assessing the impact of exposure to a model who expresses happiness contingent upon his own selfishness or generosity. A second purpose is the exploration of the affects of rationalized exhortations. Results of previous experiments, which have employed simple restatements of a social responsibility norm as their pro social exhortations, have consistently demonstrated that while a model's exhortations affect the child's judgment of him, they do not affect his behavior. This study will assess the affect on behavior of exhortations justified on the basis of their impact on the recipients.

Study of the Impact of Foreign Study on Undergraduate Students

Allan O. Pfnister

Contributions to Education: The findings in the study of students in this program should be applicable to the evaluation of other overseas study programs.

Objectives: To test the change in students' opinions and attitudes as a result of having participated in an overseas study program.

Research Plan: Based on Chickering's hypothesis relating to six major sources of influence on the student development investigate if there are observable changes in students' opinions and attitudes. As a result of having participated in the Study Service Term of Goshem College, Goshem, Indiana: 1) Description of the Program, 2) Administer a 100-item forced choice schedule (c. Robert Pace) shortly before students leave for the term, upon their return to campus and one year later. For comparison, the test will be given to a control group remaining on campus. 3) Obtain information from students regarding their own self-assessment of the experience and unit director's judgments on the personal development of students under direction.

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